

Reference Desk

BOWDOIN COLLEGE

CATALOGUE FOR 1988-1989



BRUNSWICK, MAINE

August 1988

BOWDOIN
COLLEGE

CATALOGUE FOR 1988-1989

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August 1988

In its employment and admissions practices Bowdoin is in conformity with all applicable federal and state statutes and regulations. It does not discriminate on the basis of age, race, color, sex, sexual orientation, marital status, religion, creed, ancestry, national and ethnic origin, physical or mental handicap.

The information in this catalogue was accurate at the time of publication. However, the College is a dynamic community and must reserve the right to make changes in its course offerings, degree requirements, regulations, procedures, and charges.

Bowdoin College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

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College Calendar

1988

187th Academic Year

August 28, Sunday. Rooms ready for occupancy.

August 28-30, Sunday-Tuesday. Orientation.

August 31, Wednesday. Fall semester begins at 8:00 A.M. All students required to be in residence. Registration for all students.

August 31, Wednesday. Opening of College Convocation.

September 1, Thursday. First classes of the fall semester.

October 7, Friday. James Bowdoin Day.

October 8, Saturday. Parents Day.

October 21, Friday. Fall vacation begins at 1:00 P.M.

October 26, Wednesday. Fall vacation ends, 8:00 A.M.

October 28-29, Friday-Saturday. Meetings of the Governing Boards.

October 29, Saturday. Homecoming.

November 23, Wednesday. Thanksgiving vacation begins at 1:00 P.M.

November 28, Monday. Thanksgiving vacation ends, 8:00 A.M.

November 28, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 8-12, Thursday-Monday. Reading period (at the option of each instructor).

December 13-21, Tuesday-Wednesday. Fall semester examinations.

1989

January 18, Wednesday. First classes of the spring semester, 8:00 A.M.

March 3-4, Friday-Saturday. Meetings of the Governing Boards.

March 17, Friday. Spring vacation begins at 1:00 P.M.

April 3, Monday. Spring vacation ends, 8:00 A.M.

April 3, Monday. Last day for filing applications for scholarship aid during the 1989-1990 academic year.

April 28, Friday. Last day for filing applications for graduate scholarships.

May 6-11, Saturday-Thursday. Reading period (at the option of each instructor).

May 12-18, Friday-Thursday. Spring semester examinations.

May 26, Friday. Meetings of the Governing Boards.

May 27, Saturday. The 184th Commencement Exercises.

June 1-4, Thursday-Sunday. Reunion Weekend.

1989**188th Academic Year**

August 27, Sunday. Rooms ready for occupancy.

August 27-29, Sunday-Tuesday. Orientation.

August 30, Wednesday. Fall semester begins at 8:00 A.M. All students required to be in residence. Freshman and upperclass registration.

August 30, Wednesday. Opening of College Convocation.

August 31, Thursday. First classes of the fall semester.

October 13, Friday. James Bowdoin Day.

October 14, Saturday. Parents Day.

October 20-21, Friday-Saturday. Meetings of the Governing Boards.

October 21, Saturday. Homecoming.

October 27, Friday. Fall vacation begins at 1:00 P.M.

November 1, Wednesday. Fall vacation ends, 8:00 A.M.

November 22, Wednesday. Thanksgiving vacation begins at 1:00 P.M.

November 27, Monday. Thanksgiving vacation ends, 8:00 A.M.

November 27, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 7-11, Thursday-Monday. Reading period (at the option of each instructor).

December 12-20, Tuesday-Wednesday. Fall semester examinations.

1990

January 17, Wednesday. First classes of the spring semester, 8:00 A.M.

March 2-3, Friday-Saturday. Meetings of the Governing Boards.

March 16, Friday. Spring vacation begins at 1:00 P.M.

April 2, Monday. Spring vacation ends, 8:00 A.M.

April 2, Monday. Last day for filing applications for scholarship aid during the 1990-1991 academic year.

April 27, Friday. Last day for filing applications for graduate scholarships.

May 7-12, Saturday-Thursday. Reading period.

May 13-19, Friday-Thursday. Spring semester examinations.

May 25, Friday. Meetings of the Governing Boards.

May 26, Saturday. The 185th Commencement Exercises.

May 31-June 3, Thursday-Sunday. Reunion Weekend.

1990**189th Academic Year**

August 26, Sunday. Rooms ready for occupancy.

August 26-28, Sunday-Tuesday. Orientation.

August 29, Wednesday. Fall semester begins at 8:00 A.M. All students required to be in residence. Registration for all students.

August 29, Wednesday. Opening of College Convocation.

August 30, Thursday. First classes of the fall semester.

October 5, Friday. James Bowdoin Day.

October 6, Saturday. Parents Day.

October 19, Friday. Fall vacation begins at 1:00 P.M.

October 24, Wednesday. Fall vacation ends, 8:00 A.M.

October 26-27, Friday-Saturday. Meetings of the Governing Boards.

October 27, Saturday. Homecoming.

November 21, Wednesday. Thanksgiving vacation begins at 1:00 P.M.

November 26, Monday. Thanksgiving vacation ends, 8:00 A.M.

November 26, Monday. Last day for filing applications for scholarship aid during the spring semester.

December 6-10, Thursday-Monday. Reading period (at the option of each instructor).

December 11-19, Tuesday-Wednesday. Fall semester examinations.

1991

January 16, Wednesday. First classes of the spring semester, 8:00 A.M.

March 1-2, Friday-Saturday. Meetings of the Governing Boards.

March 15, Friday. Spring vacation begins at 1:00 P.M.

April 1, Monday. Spring vacation ends, 8:00 A.M.

April 1, Monday. Last day for filing applications for scholarship aid during the 1991-1992 academic year.

April 26, Friday. Last day for filing applications for graduate scholarships.

May 4-9, Saturday-Thursday. Reading period (at the option of each instructor).

May 10-16, Friday-Thursday. Spring semester examinations.

May 24, Friday. Meetings of the Governing Boards.

May 25, Saturday. The 186th Commencement Exercises.

May 30-June 2, Thursday-Sunday. Reunion Weekend.

1988

SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3	1	1 2 3 4 5	1 2 3
4 5 6 7 8 9 10	2 3 4 5 6 7 8	6 7 8 9 10 11 12	4 5 6 7 8 9 10
11 12 13 14 15 16 17	9 10 11 12 13 14 15	13 14 15 16 17 18 19	11 12 13 14 15 16 17
18 19 20 21 22 23 24	16 17 18 19 20 21 22	20 21 22 23 24 25 26	18 19 20 21 22 23 24
25 26 27 28 29 30	23 24 25 26 27 28 29	27 28 29 30	25 26 27 28 29 30 31
	30 31		

1989

JANUARY	FEBRUARY	MARCH	APRIL
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7	1 2 3 4	1 2 3 4	1
8 9 10 11 12 13 14	5 6 7 8 9 10 11	5 6 7 8 9 10 11	2 3 4 5 6 7 8
15 16 17 18 19 20 21	12 13 14 15 16 17 18	12 13 14 15 16 17 18	9 10 11 12 13 14 15
22 23 24 25 26 27 28	19 20 21 22 23 24 25	19 20 21 22 23 24 25	16 17 18 19 20 21 22
29 30 31	26 27 28	26 27 28 29 30 31	23 24 25 26 27 28 29
			30

MAY	JUNE	JULY	AUGUST
1 2 3 4 5 6	1 2 3	1	1 2 3 4 5
7 8 9 10 11 12 13	4 5 6 7 8 9 10	2 3 4 5 6 7 8	6 7 8 9 10 11 12
14 15 16 17 18 19 20	11 12 13 14 15 16 17	9 10 11 12 13 14 15	13 14 15 16 17 18 19
21 22 23 24 25 26 27	18 19 20 21 22 23 24	16 17 18 19 20 21 22	20 21 22 23 24 25 26
28 29 30 31	25 26 27 28 29 30	23 24 25 26 27 28 29	27 28 29 30 31
		30 31	

SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 2	1 2 3 4 5 6 7	1 2 3 4	1 2
3 4 5 6 7 8 9	8 9 10 11 12 13 14	5 6 7 8 9 10 11	3 4 5 6 7 8 9
10 11 12 13 14 15 16	15 16 17 18 19 20 21	12 13 14 15 16 17 18	10 11 12 13 14 15 16
17 18 19 20 21 22 23	22 23 24 25 26 27 28	19 20 21 22 23 24 25	17 18 19 20 21 22 23
24 25 26 27 28 29 30	29 30 31	26 27 28 29 30	24 25 26 27 28 29 30
			31

1990

JANUARY	FEBRUARY	MARCH	APRIL
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6	1 2 3	1 2 3	1 2 3 4 5 6 7
7 8 9 10 11 12 13	4 5 6 7 8 9 10	4 5 6 7 8 9 10	8 9 10 11 12 13 14
14 15 16 17 18 19 20	11 12 13 14 15 16 17	11 12 13 14 15 16 17	15 16 17 18 19 20 21
21 22 23 24 25 26 27	18 19 20 21 22 23 24	18 19 20 21 22 23 24	22 23 24 25 26 27 28
28 29 30 31	25 26 27 28	25 26 27 28 29 30 31	29 30

MAY	JUNE	JULY	AUGUST
1 2 3 4 5	1 2	1 2 3 4 5 6 7	1 2 3 4
6 7 8 9 10 11 12	3 4 5 6 7 8 9	8 9 10 11 12 13 14	5 6 7 8 9 10 11
13 14 15 16 17 18 19	10 11 12 13 14 15 16	15 16 17 18 19 20 21	12 13 14 15 16 17 18
20 21 22 23 24 25 26	17 18 19 20 21 22 23	22 23 24 25 26 27 28	19 20 21 22 23 24 25
27 28 29 30 31	24 25 26 27 28 29 30	29 30 31	26 27 28 29 30 31

The Purpose of the College

BOWDOIN COLLEGE believes strongly that there is an intrinsic value in a liberal arts education, for the individual student, for the College as an institution, and for society as a whole. Historically, the arrangement of courses and instruction that combine to produce liberal arts education has changed and undoubtedly will continue to change, but certain fundamental and underlying goals remain constant.

It is difficult to define these goals without merely repeating old verities, but certain points are critical. The thrust of a liberal arts education is not the acquisition of a narrow, technical expertise; it is not a process of coating young people with a thin veneer of "civilization." That is not to say that liberal arts education in any way devalues specific knowledge or the acquisition of fundamental skills. On the contrary, an important aspect of sound liberal arts education is the development of the power to read with critical perception, to think coherently, to write effectively, to speak with force and clarity, and to act as a constructive member of society. But liberal arts education seeks to move beyond the acquisition of specific knowledge and skills toward the acquisition of an understanding of man, nature, and the interaction of the two and toward the development of a characteristic style of thought which is informed, questioning, and marked by the possession of intellectual courage. When defined in terms of its intended product, the purpose of the College is to train professionally competent people of critical and innovative mind, who can grapple with the technical complexities of our age and whose flexibility and concern for humanity are such that they offer us a hope of surmounting the increasing depersonalization and dehumanization of our world. The College does not seek to transmit a specific set of values; rather, it recognizes a formidable responsibility to teach students what values are and to encourage them to develop their own.

Liberal arts education is, in one sense, general, because it is concerned with many different areas of human behavior and endeavor, many civilizations of the world, many different aspects of the human environment. It seeks to encourage the formation of habits of curiosity, rigorous observation, tolerant understanding, and considered judgment, while at the same time fostering the development of varied modes of communicative and artistic expression. This concern for breadth and for the appreciation of varying modes of perception is combined with a commitment to study some particular field of learning in sufficient depth to ensure relative mastery of its content and methods. In short, a liberal arts education aims at fostering the development of modes of learning, analysis, judgment, and expression which are essential both to subsequent professional training and to the ongoing

The Purpose of the College

ing process of self-education by which one refines one's capacity to function autonomously as an intellectual and moral being.

To achieve these goals, the individuals who teach at the College must strive constantly to live up to their commitment in their course offerings; likewise students must have an equal commitment to do so in their course selections. The commitment is a collective one on the part of the entire college community. Each of the academic components of the College is under a heavy obligation to make its field of study accessible in some manner to the entire student body and to satisfy the needs of the nonmajor as well as those of the specialist.

The College is not and should not be a cloister or monastic retreat from the problems of the world. Rather, the College is a collection of people deeply and passionately involved in their community, their nation, and their world. When liberal arts education is faithful to its mission, it encourages and trains young people who are sensitive to the crucial problems of our time and who have the kind of mind and the kind of inspiration to address them fearlessly and directly. This is its goal and the standard by which it should be judged.

*A statement prepared by the Faculty-Student Committee
on Curriculum and Educational Policy, 1976.*

Historical Sketch

BOWDOIN COLLEGE was established by charter from the General Court of Massachusetts on June 24, 1794, after repeated petitions to the commonwealth by citizens who wanted to provide educational opportunity in the District of Maine, then a rapidly growing frontier. Various names for the new institution were considered; the choice of "Bowdoin" was influenced both by a desire to honor the late distinguished governor of the commonwealth, James Bowdoin II, and by intimations received from his son, James Bowdoin III, of a substantial gift toward endowment. Brunswick was selected as the site for the College in 1796, but the erection of a building to house the College was not accomplished until 1802 because it had been difficult to convert into cash the lands that had been granted by the General Court. On September 2 of that year, the Reverend Joseph McKeen was installed as the first president of the College. In his inaugural speech, McKeen called upon those assembled to remember "that literary institutions are founded and endowed for the common good, and not for the private advantage of those who resort to them." On the next day Bowdoin began its active educational life with eight students and one faculty member in addition to the president.

The story of Bowdoin in its early years is an index to its entire history. Its first president was a man of religion and of science. Its first benefactor was a distinguished diplomat, statesman, and gentleman of broad culture; and the inheritance of his extensive library, his scientific instruments, and his fine collection of art established at the College a lasting conviction of the wisdom of strength in these areas of institutional resources. Its original Board was composed of strongly religious men, individually devoted to the Congregational Church as thoroughly as they were to the democratic ideals of a new nation.

Under McKeen and his successor, Jesse Appleton, the curriculum in the early years was rigidly prescribed and strong in the classics. In the field of science, mathematics was soon joined by the study of chemistry and mineralogy. Though small in size, the College had some of the greatest teachers it has known, and among the early graduates were several marked for future fame: for instance, Nathan Lord (1809), for thirty-five years president of Dartmouth; Seba Smith (1818), early humorist; Jacob Abbott (1820), prolific author of the "Rollo" books; William Pitt Fessenden (1823), for a short time President Lincoln's secretary of the treasury; Franklin Pierce (1824), fourteenth president of the United States; Nathaniel Hawthorne and Henry Wadsworth Longfellow, both of the Class of 1825; and John Brown Russwurm, of the class of 1826, Bowdoin's first black graduate, publisher, and

governor of the colony of Maryland in Liberia at the time of his death in 1851.

President William Allen, called in 1819 from the presidency of Dartmouth, introduced modern languages and fought the legal battles necessary to establish Bowdoin as a private college independent of the new state of Maine. In 1820 the College established a medical school, which in the 101 years of its existence produced many well-trained doctors who practiced in Maine and, to a lesser extent, elsewhere. It is believed that two members of the Class of 1849 were among the first black doctors to receive medical degrees in the United States. In 1921, when the needed clinical facilities and technical equipment had become too complex and expensive for a small institution to supply, it was deemed expedient to discontinue the school.

Bowdoin was established more on faith than endowment, and its finances suffered severely in the aftermath of the panic of 1837. Leonard Woods, a professor of biblical literature at Bangor Theological Seminary, was chosen as president in 1839 and served until 1866. Under his direction, Bowdoin's growth was slow and steady. Social fraternities appeared on the campus in the 1840s, followed by organized athletics in the late 1850s. The *Bowdoin Orient*, which claims to be the oldest continuously published college weekly in the country, appeared first in 1871. As the controversy over slavery worked towards a climax, the home of Professor Smyth was a station of the "underground railroad" for escaped slaves; and here, in another professorial household, was written the book that was to arouse the conscience of a nation, *Uncle Tom's Cabin*. During the Civil War the College sent into the service a greater number of men in proportion to its size than any other college in the North.

The twenty years following the Civil War were the most critical in the history of the College. After President Harris's short term of four years (1867-1871), Joshua Lawrence Chamberlain, Maine's most distinguished war hero and governor of the state for four terms following his return to civilian life, was elected president. During these two administrations the curriculum was modernized somewhat, but the establishment of an engineering school in 1871 was unsuccessful, since it survived for only ten years. Its most famous graduate was Admiral Robert E. Peary (1877), who led the first expedition to reach the North Pole.

President Chamberlain, for all his great services to college, state, and nation, was unequal to coping with the difficulties now besetting the institution: inadequate endowment and equipment, a decreasing enrollment, dissension among the faculty and Boards. Probably no one else connected with either group could have succeeded in the circumstances. Chamberlain's resignation in 1883 provided an opportunity to secure from outside the College the vigorous leadership imperatively needed.

The inauguration in 1885, after a two-year interregnum, of the Reverend

William DeWitt Hyde marks the real beginning of another era. He brought to his task of rejuvenating the institution a boundless physical capacity that was matched by his awareness of a modern and changing world and by scholarly ability that made his national reputation an ornament to Bowdoin. He built the College figuratively and literally, introducing new subjects into the curriculum and enlarging the physical facilities on the campus by over 100 percent. Under him, enrollment increased from 119 in 1885 to 400 in 1915 and the endowment rose from \$378,273 to \$2,312,868. He emphasized teaching as the responsibility of the College and learning as the responsibility of the students. His vigor impregnated the whole life and spirit of the College. It was under President Hyde that Bowdoin's philosophy of its students and of its faculty members as responsible, independent individuals became fixed.

Kenneth C. M. Sills succeeded President Hyde after the latter's death in 1917. He was a natural successor (though not a slavish disciple) of President Hyde. He carried forward his predecessor's program, seeing the College successfully through the upheavals concomitant to two wars. Under him, Bowdoin gradually emerged from being a "country college" to a new and increasingly respected status as a countrywide college. Physical facilities were improved and increased. The faculty grew from thirty-two to eighty-one; enrollment, from 400 to double that figure; and endowment, from \$2,473,451 to \$12,312,274. Student activities were expanded, and the fraternity system was developed into a cooperative and democratic component of student life.

President Sills was succeeded by James Stacy Coles in the fall of 1952. During his fifteen-year tenure, Bowdoin met the rapidly changing demands of society and students by adopting curricular innovations, expanding the size of its faculty, and improving its facilities at a faster pace than during any comparable period in its history. It was during these years that Bowdoin thoroughly revised its curriculum, extended honors work to all gifted students, introduced independent study courses, initiated an undergraduate research fellowship program, and started its pioneering Senior Year Program. To accomplish these academic improvements, the College expanded the size of its faculty by over a third, to 109, and raised salaries to a level which has enabled it to continue attracting and retaining outstanding teachers. The value of the College's plant showed a similar dramatic increase. Dayton Arena, Morrell Gymnasium, Chamberlain Hall, Wentworth Hall, Coles Tower, Coleman Hall, Gibson Hall, and Hawthorne-Longfellow Library were constructed. Pickard Theater was constructed in Memorial Hall; Massachusetts Hall, Hubbard Hall, and three dormitories were renovated; and the Moulton Union and Dudley Coe Health Center were enlarged.

President Coles resigned at the end of 1967. Following the acting presi-

dency of Athern P. Daggett, Roger Howell, Jr., a member of Bowdoin's Class of 1958, Rhodes scholar, and chairman of the Department of History, became the tenth president of the College on January 1, 1969. Only thirty-two at the time of his election, Dr. Howell had already achieved international eminence as a scholar of British history.

Under his leadership Bowdoin expanded its curriculum to include Afro-American studies, a major in biochemistry, and courses concerned with the environment. In 1970 it admitted women undergraduates and began an expansion of its enrollment from 950 to 1,350. Other accomplishments included the development of a highly sophisticated computing center, an increase in student representation in the governance of the College, and the successful start of a ten-year, \$37,775,000 fund-raising campaign.

President Howell resigned on June 30, 1978, and returned to full-time teaching at the College. Willard F. Enteman, provost of Union College, was inaugurated Bowdoin's eleventh president on September 22, 1978.

Dr. Enteman resigned on December 31, 1980, and Professor A. LeRoy Greason became Bowdoin's acting president on January 1, 1981. Dr. Greason, a graduate of Wesleyan University, holds graduate degrees from Harvard. He has been a member of the Department of English since 1952. During that time he also served as Dean of Students for four years and Dean of the College for nine years.

On October 9, 1981, Dr. Greason was inaugurated the twelfth president of Bowdoin College, the fourth member of the faculty to be named to the office.

During his presidency, distribution requirements have been reestablished and the curriculum has been revised to include a Department of Computer Science and Information Studies and a Department of Theater Arts and to emphasize writing for freshmen and greater challenges for upperclassmen in advanced courses and in interdisciplinary programs. The Governing Boards have revised their by-laws to strengthen the presidency and to provide for a more effective development of policies. On May 25, 1984, the Governing Boards voted to launch a new capital campaign to increase endowment, enlarge the faculty, expand the scholarship fund, improve facilities, and meet other capital needs.

Officers of Government

PRESIDENT OF THE COLLEGE

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), President of the College.

THE PRESIDENT AND TRUSTEES

Leonard Wolsey Cronkhite, Jr., A.B. (Bowdoin), M.D. (Harvard), LL.D. (Bowdoin, Northeastern), L.H.D. (Curry), Chair. Elected Overseer, 1969; elected Trustee, 1970. Term expires 1994.

Rosalynne Spindel Bernstein, A.B. (Radcliffe). Elected Overseer, 1973; elected Trustee, 1981. First term expires 1989.

Paul Peter Brontas, A.B. (Bowdoin), B.A., M.A. (Oxford), J.D., LL.B. (Harvard). Elected Overseer, 1974; elected Trustee, 1984. First term expires 1992.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), President of the College, ex officio. Elected 1981.

Caroline Lee Herter, Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

John Roscoe Hupper, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1970; elected Trustee, 1982. First term expires 1990.

Dennis James Hutchinson, A.B. (Bowdoin), M.A. (Oxford), LL.M. (Texas, Austin). Elected Overseer, 1975; elected Trustee, 1987. First term expires 1995.

Roscoe Cunningham Ingalls, Jr., B.S. (Bowdoin). Elected Overseer, 1968; elected Trustee, 1973. Term expires 1989.

John Francis Magee, A.B. (Bowdoin), M.B.A. (Harvard), A.M. (Maine). Elected Overseer, 1972; elected Trustee, 1979. Term expires 1995.

Jean Sampson, A.B. (Smith). Elected Overseer, 1976; elected Trustee, 1986. First term expires 1994.

Carolyn Walch Slayman, A.B. (Swathmore), Ph.D. (Rockefeller), Sc.D. (Bowdoin). Elected Overseer, 1976; elected Trustee, 1988. First term expires 1996.

Frederick Gordon Potter Thorne, A.B. (Bowdoin). Elected Overseer, 1972; elected Trustee, 1982. First term expires 1990.

Richard Arthur Wiley, A.B. (Bowdoin), B.C.L. (Oxford), LL.M. (Harvard). Elected Overseer, 1966; elected Trustee, 1981. First term expires 1989.

TRUSTEES EMERITI

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack). President of the College, 1952-1967; elected emeritus, 1977.

Sanford Burnham Cousins, A.B., LL.D. (Bowdoin). Elected Overseer, 1950; elected Trustee, 1959; elected emeritus, 1974.

David Watson Daly Dickson, A.B. (Bowdoin), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1966; elected Trustee, 1975; elected emeritus, 1982.

William Plummer Drake, A.M., LL.D. (Bowdoin). Elected Overseer, 1955; elected Trustee, 1970; elected emeritus, 1988.

Leland Matthew Goodrich, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Columbia). Elected Overseer, 1961; elected Trustee, 1966; elected emeritus, 1975.

Merton Goodell Henry, A.B. (Bowdoin), LL.B. (George Washington), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1974; elected emeritus, 1987.

Roger Howell, Jr., A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin). President of the College, 1969-1978; elected emeritus, 1978.

Jotham Donnell Pierce, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1963; elected Trustee, 1976; elected emeritus, 1984.

William Curtis Pierce, A.B. (Bowdoin), LL.B. (Harvard), LL.D. (Bowdoin). Elected Overseer, 1962; elected Trustee, 1967; elected emeritus, 1981.

Everett Parker Pope, B.S., A.M. (Bowdoin). Elected Overseer, 1961; elected Trustee, 1977; elected emeritus, 1988.

Winthrop Brooks Walker, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1966; elected Trustee, 1970; elected emeritus, 1986.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary. Elected 1977.

THE BOARD OF OVERSEERS

Norman Paul Cohen, A.B. (Bowdoin), J.D. (Harvard), President. Elected Overseer, 1977. Term expires 1989.

Norman Colman Nicholson, Jr., A.B. (Bowdoin), Vice President. Elected Overseer, 1979. Term expires 1991.

Thomas Hodge Allen, A.B. (Bowdoin), B.Phil. (Oxford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

Peter Charles Barnard, A.B. (Bowdoin), A.M. (Middlebury), Secretary of the President and Trustees, *ex officio*.

David Pillsbury Becker, A.B. (Bowdoin), A.M. (New York). Elected Overseer, 1986. First term expires 1992.

Theodore Hamilton Brodie, A.B. (Bowdoin). Elected Overseer, 1983. First term expires 1989.

George Hench Butcher III, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.

Kenneth Irvine Chenault, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1986. First term expires 1992.

William Francis Farley, A.B. (Bowdoin), J.D. (Boston College). Elected Overseer, 1980. Term expires 1992.

Frank John Farrington, A.B. (Bowdoin), M.S. (The American College). Elected Overseer, 1984. First term expires 1990.

Leon Arthur Gorman, A.B., LL.D. (Bowdoin). Elected Overseer, 1983. First term expires 1989.

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), President of the College, *ex officio*.

Marvin Howe Green, Jr. Elected Overseer, 1985. First term expires 1991.

Gordon Francis Grimes, A.B. (Bowdoin), B.A. (Cambridge), J.D. (Boston). Elected Overseer, 1986. First term expires 1992.

Kenneth David Hancock, A.B. (Bowdoin). Elected Overseer, 1988. First term expires 1994.

Laurie Ann Hawkes, A.B. (Bowdoin), M.B.A. (Cornell). Elected Overseer, 1986. First term expires 1992.

William Harris Hazen, A.B. (Bowdoin), J.D. (Harvard). Elected Overseer, 1981. Term expires 1993.

- Regina Elbinger Herzlinger**, B.S. (Massachusetts Institute of Technology), D.B.A. (Harvard). Elected Overseer, 1983. First term expires 1989.
- Reverend Judith Linnea Anderson Hoehler**, A.B. (Douglass), M.Div. (Harvard). Elected Overseer, 1980. Term expires 1992.
- Judith Magyar Isaacson**, A.B. (Bates), A.M. (Bowdoin). Elected Overseer, 1984. First term expires 1990.
- Donald Richardson Kurtz**, A.B. (Bowdoin), M.B.A. (Columbia). Elected Overseer, 1984. First term expires 1990.
- Herbert Mayhew Lord**, A.B. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1980. Term expires 1992.
- Diane Theis Lund**, A.B. (Stanford), J.D. (Harvard). Elected Overseer, 1985. First term expires 1991.
- George Calvin Mackenzie**, A.B. (Bowdoin), M.A. (Tufts), Ph.D. (Harvard). Elected Overseer, 1986. First term expires 1992.
- Cynthia Ann McFadden**, A.B. (Bowdoin), LL.B. (Columbia). Elected Overseer, 1986. First term expires 1992.
- Richard Allen Morrell**, A.B. (Bowdoin). Elected Overseer, 1979. Term expires 1991.
- Campbell Barrett Niven**, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.
- David Alexander Olsen**, A.B. (Bowdoin). Elected Overseer, 1986. First term expires 1992.
- Michael Henderson Owens**, A.B. (Bowdoin), M.D., M.P.H. (Yale). Elected 1988. First term expires 1994.
- Louis Robert Porteous, Jr.**, A.B. (Bowdoin), L.L.D. (Portland School of Art). Elected Overseer 1982. Term expires 1994.
- Hollis Susan Rafkin-Sax**, A.B. (Bowdoin). Elected Overseer 1988. First term expires 1994.
- Peter Donald Relic**, A.B. (Bowdoin), A.M. (Case Western Reserve), Ed.D. (Harvard). Elected Overseer, 1987. First term expires 1993.
- Peter Metcalf Small**, A.B. (Bowdoin). Elected 1988. First term expires 1994.
- John Ingalls Snow**, A.B. (Bowdoin), M.B.A. (Wharton). Elected Overseer, 1986. First term expires 1992.

Phineas Sprague, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.

Terry Douglas Stenberg, A.B. (Bowdoin), Ed.M. (Boston University), Ph.D. (Minnesota). Elected Overseer, 1983. First term expires 1989.

Deborah Jean Swiss, A.B. (Bowdoin), Ed.M., Ed.D. (Harvard). Elected Overseer, 1983. First term expires 1989.

Raymond Stanley Troubh, A.B. (Bowdoin), LL.B. (Yale). Elected Overseer, 1978. Term expires 1990.

Mary Ann Villari, A.B. (Bowdoin), J.D. (Boston University). Elected Overseer, 1987. First term expires 1993.

William Grosvenor Wadman. Elected Overseer 1988. First term expires 1994.

David Earl Warren, A.B. (Bowdoin), J.D. (Columbia). Elected Overseer 1988. First term expires 1994.

Timothy Matlack Warren, A.B. (Bowdoin). Elected Overseer, 1985. First term expires 1991.

Russell Bacon Wight, Jr., A.B. (Bowdoin). Elected Overseer, 1987. First term expires 1993.

Elizabeth Christian Woodcock, A.B. (Bowdoin), A.M. (Stanford), J.D. (Maine). Elected Overseer, 1985. First term expires 1991.

Donald Mack Zuckert, A.B. (Bowdoin), LL.B. (New York University). Elected Overseer, 1987. First term expires 1993.

OVERSEERS EMERITI

Charles William Allen, A.B. (Bowdoin), J.D. (Michigan), LL.D. (Bowdoin). Elected Overseer, 1967; elected emeritus, 1976.

Neal Woodside Allen, Jr., A.B. (Bowdoin), A.M., Ph.D. (Harvard). Elected Overseer, 1972; elected emeritus, 1984.

Willard Bailey Arnold III, A.B. (Bowdoin), M.S. (New York University). Elected Overseer, 1970; elected emeritus, 1984.

Charles Manson Barbour, A.B. (Bowdoin), M.D., C.M. (McGill). Elected Overseer, 1960; elected emeritus, 1977.

Richard Kenneth Barksdale, A.B. (Bowdoin), A.M. (Syracuse), A.M., Ph.D. (Harvard), L.H.D. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.

- Robert Ness Bass**, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1964; elected emeritus, 1980.
- Louis Bernstein**, A.B., LL.D. (Bowdoin). Elected Overseer, 1958; elected emeritus, 1973.
- Gerald Walter Blakeley, Jr.**, A.B. (Bowdoin). Elected Overseer, 1960; elected emeritus, 1976.
- Matthew Davidson Branche**, A.B. (Bowdoin), M.D. (Boston University). Elected Overseer, 1970; elected emeritus, 1985.
- William Smith Burton**, B.S. (Bowdoin), LL.B. (Harvard). Elected Overseer, 1971. Elected emeritus, 1986.
- John Everett Cartland, Jr.**, A.B. (Bowdoin), M.D. (Columbia). Elected Overseer, 1976. Elected emeritus, 1988.
- Honorable William Sebastian Cohen**, A.B. (Bowdoin), LL.B. (Boston University), LL.D. (St. Joseph, Maine, Western New England, Bowdoin, Nasson). Elected Overseer, 1973; elected emeritus, 1985.
- Reverend Richard Hill Downes**, A.B. (Bowdoin), S.T.B. (General Theological Seminary). Elected Overseer, 1970; elected emeritus, 1983.
- Oliver Farrar Emerson II**, A.B. (Bowdoin). Elected Overseer, 1974; elected emeritus, 1986.
- Honorable Joseph Lyman Fisher**, B.S. (Bowdoin), A.M., Ph.D. (Harvard), Sc.D. (Bowdoin), LL.D. (Allegheny), L.H.D. (Starr King School of Ministry). Elected Overseer, 1970; elected emeritus, 1985.
- Roy Anderson Foulke**, B.S., A.M., LL.D. (Bowdoin). Elected Overseer, 1948; elected emeritus, 1973.
- Herbert Spencer French, Jr.**, A.B. (Bowdoin), M.B.A. (Pennsylvania). Elected Overseer, 1976. Elected emeritus, 1988.
- Paul Edward Gardent, Jr.**, B.S. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.
- Albert Edward Gibbons, Jr.**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Jonathan Standish Green**, A.B. (Bowdoin), M.B.A. (California). Elected Overseer, 1975; elected emeritus, 1987.
- Nathan Ira Greene**, A.B. (Bowdoin). Elected Overseer, 1964; elected emeritus, 1980.

- Peter Francis Hayes**, A.B. (Bowdoin), B.A., M.A. (Oxford), A.M., M.Phil., Ph.D. (Yale). Elected Overseer, 1969; elected emeritus, 1983.
- William Dunning Ireland, Jr.**, A.B. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- Lewis Wertheimer Kresch**, A.B. (Bowdoin), M.B.A. (Harvard). Elected Overseer, 1970; elected emeritus, 1983.
- Albert Frederick Lilley**, A.B. (Bowdoin), L.L.B. (Virginia). Elected Overseer, 1976. Elected emeritus, 1988.
- Malcolm Elmer Morrell, Jr.**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1974; elected emeritus, 1986.
- Robert Warren Morse**, B.S. (Bowdoin), Sc.M., Ph.D. (Brown), Sc.D. (Bowdoin). Elected Overseer, 1971; elected emeritus, 1986.
- William Howard Niblock**, B.S. (Bowdoin), A.M., Ed.M. (Harvard), L.H.D. (Nasson, Bowdoin). Elected Overseer, 1958; elected emeritus, 1975.
- John Thorne Perkin**, A.B. (Bowdoin). Elected Overseer, 1973; elected emeritus, 1985.
- Payson Stephen Perkins**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- Robert Chamberlain Porter**, A.B. (Bowdoin), LL.B. (Pennsylvania), LL.D. (Bowdoin). Elected Overseer, 1975; elected emeritus, 1987.
- Thomas Prince Riley**, A.B. (Bowdoin). Elected Secretary, 1955; elected emeritus, 1983.
- Alden Hart Sawyer**, B.S., LL.D. (Bowdoin). Elected Overseer, 1954; elected Treasurer, 1967; elected emeritus, 1979.
- Alden Hart Sawyer, Jr.**, A.B. (Bowdoin), M.B.A. (Michigan). Elected Overseer, 1976; elected emeritus, 1985.
- Robert Nelson Smith**, Lieutenant General (Ret.), B.S. (Bowdoin), LL.D. (Kyung Hee University). Elected Overseer, 1965; elected emeritus, 1978.
- Lewis Vassor Vafiades**, A.B. (Bowdoin), LL.B. (Boston University). Elected Overseer, 1973; elected emeritus, 1979.
- William David Verrill**, A.B. (Bowdoin). Elected Overseer, 1980; elected emeritus, 1986.
- George Curtis Webber II**, A.B. (Bowdoin). Elected Secretary, 1983; elected emeritus, 1986.

Honorable Donald Wedgwood Webber, A.B. (Bowdoin), LL.B. (Harvard), L.H.D. (Bates, Defiance), LL.D. (Bowdoin, Maine). Elected Overseer, 1962; elected emeritus, 1979.

Harry Knight Warren, A.B. (Pennsylvania), Secretary. Elected Secretary, 1986.

COMMITTEES OF THE BOARDS

Joint Standing Committees*

Academic Affairs: Judith M. Isaacson, *Chair*; David P. Becker, Rosalyne S. Bernstein, A. LeRoy Greason, Dennis J. Hutchinson, Diane Lund, Michael H. Owens, T. Douglas Stenberg, Timothy M. Warren, Richard A. Wiley, James E. Ward, III, *faculty*, one faculty member to be selected from Curriculum and Educational Policy Committee, Scott A. Mendel '90, Serena R. Zabin '91, Tamara M. Dassanayake '90, *alternate*, Suzana K. E. Makowski '90, *alternate*.

Audit: Regina E. Herzlinger, *Chair*; Roscoe C. Ingalls, Jr., Diane Lund, Norman C. Nicholson, Jr., Jean Sampson.

Development: Marvin H. Green, Jr., *Chair*; A. LeRoy Greason, Frank J. Farrington, C. Lee Herter, John F. Magee, Cynthia G. McFadden, David A. Olsen, John I. Snow, Frederick G. P. Thorne, Donald M. Zuckert, Samuel S. Butcher, *faculty*, Clifton C. Olds, *faculty*, Dirk G. Asherman '90, Asaf M. Farashuddin '89, Serena R. Zabin '91, *alternate*.

Executive: Leonard W. Cronkhite, Jr., *Chair*; Thomas H. Allen, Norman P. Cohen, A. LeRoy Greason, Marvin H. Green, John R. Hupper, Dennis J. Hutchinson, Judith M. Isaacson, Donald R. Kurtz, R. Wells Johnson, *faculty*, student to be named.

Financial Planning: Dennis J. Hutchinson, *Chair*; George H. Butcher, *Vice Chair*; Paul P. Brontas, A. LeRoy Greason, William H. Hazen, G. Calvin Mackenzie, Richard A. Morrell, Campbell B. Niven, Carolyn W. Slayman, Deborah J. Swiss, Steven R. Cerf, *faculty*, Allen L. Springer, *faculty*, Bruce A. Wilson '90.

Honors: Norman P. Cohen, *Chair*; A. LeRoy Greason, C. Lee Herter, Judith L. Hoehler, Roscoe C. Ingalls, John F. Magee, Hollis Rafkin-Sax, David E. Warren, Steven R. Cerf, *faculty*, Elizabeth Millan '90, Scott A. Mendel '90, *alternate*.

Investments: Donald R. Kurtz, *Chair*; Paul P. Brontas, A. LeRoy Greason, K. David Hancock, Laurie A. Hawkes, John F. Magee, L. Robert Por-

* The President of the College is *ex officio* a member of all standing committees, except the Audit Committee.

teous, Jr., Carolyn W. Slayman, Peter M. Small, Raymond S. Troubh, James E. Ward, III, *faculty*, Asaf Farashuddin '89, Michael J. Sacopulos '91, *alternate*.

Subcommittee on Social Responsibility: Judith L. Hoehler, *Chair*; David P. Becker, Paul P. Brountas, A. LeRoy Greason, Carolyn W. Slayman, Craig A. McEwen, *faculty*, David J. Vail, *faculty*, Elizabeth Millan '90, Tamara M. Dassanayake '90, *alternate*.

Nominating: Elizabeth C. Woodcock, *Chair*; Rosalyne S. Bernstein, A. LeRoy Greason, Campbell B. Niven, David A. Olsen, Frederick G. P. Thorne, Allen L. Springer, *faculty*, Elizabeth G. Yarnell '91, Kirsten Ek '90, *alternate*.

Physical Plant: Thomas H. Allen, *Chair*; Rosalyne S. Bernstein, Theodore H. Brodie, William Farley, A. LeRoy Greason, Gordon F. Grimes, John R. Hupper, Roscoe C. Ingalls, Peter D. Relic, William Wadman, A. Raymond Rutan, *faculty*, John H. Turner, *faculty*, two students.

Student Affairs: John R. Hupper, *Chair*; Kenneth I. Chenault, A. LeRoy Greason, Leon A. Gorman, Herbert M. Lord, Jean Sampson, Phineas Sprague, Mary Ann Villari, Russell B. Wight, Jr., Sarah F. McMahon, *faculty*, C. Thomas Settlemire, *faculty*, Suzana K. E. Makowski '90, Serena R. Zabin '91, *alternate*.

Subcommittee on Minority Affairs: George H. Butcher, III, *Chair*; Richard K. Barksdale, Leon M. Braswell, III, Iris W. Davis, A. LeRoy Greason, Daniel Levine, Gayle R. Pemberton, Carolyn W. Slayman, Deborah J. Swiss, Russell B. Wight, Jr., students and alumni to be named.

FACULTY REPRESENTATIVES

R. Wells Johnson (1989), Allen L. Springer (1989), James E. Ward, III (1989), Steven R. Cerf (1990), one faculty member to be elected by the Curriculum and Educational Policy Committee in September.

STUDENT REPRESENTATIVES

Trustees: James Harrop, Jr. '90 and Suzana Makowski '90, *alternate*.

Overseers: Maureen Rayhill '89 and Robert Smith '91, *alternate* to be named.

ALUMNI COUNCIL REPRESENTATIVES

Executive Committee: Michael S. Cary '71.

Trustees: Paula M. Wardynski '79 and Edward E. Langbein, Jr. '57.

Overseers: D. Ellen Shuman '76 and Robert H. Millar '62.

Officers of Instruction

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), President of the College and Professor of English. (1952)*

Philip Conway Beam, A.B., A.M., Ph.D. (Harvard), Henry Johnson Professor of Art and Archaeology Emeritus. (1936)

Robert Kingdon Beckwith, B.S. (Lehigh), M.S. (Juilliard), Professor of Music Emeritus. (1953)

Rhoda Zimand Bernstein, A.B. (Middlebury), A.M. (New Mexico), Registrar Emerita. (1979)

Ray Stuart Bicknell, B.S., M.S. (Springfield), Coach in the Department of Athletics Emeritus. (1962)

Kenneth James Boyer, A.B. (Rochester), B.L.S. (New York State Library School), College Editor Emeritus. (1927)

Richard Leigh Chittim, A.B. (Bowdoin), B.A., M.A. (Oxford), Wing Professor of Mathematics Emeritus. (1942)

James Stacy Coles, B.S. (Mansfield), A.B., A.M., Ph.D. (Columbia), D.Sc. (New Brunswick), LL.D. (Brown, Maine, Colby, Columbia, Middlebury, Bowdoin), Sc.D. (Merrimack), President of the College Emeritus. (1952)

Louis Osborne Cox, A.B. (Princeton), Pierce Professor of English Emeritus. (1955)

Paul Gifford Darling, A.B. (Yale), A.M. (New York University), Ph.D. (Columbia), Professor of Economics Emeritus. (1956)

Edward Joseph Geary, A.B. (Maine), A.M., Ph.D. (Columbia), hon. M.A. (Harvard), Longfellow Professor of Romance Languages Emeritus. (1965)

Lawrence Sargent Hall, A.B. (Bowdoin), A.M., Ph.D. (Yale), Henry Leland Chapman Professor of English Literature Emeritus. (1946)

* Date of first appointment to the faculty.

Daniel Francis Hanley, A.B. (Bowdoin), M.D. (Columbia), Sc.D. (Bowdoin), College Physician Emeritus. (1946)

Paul Vernon Hazelton, B.S. (Bowdoin), Ed.M. (Harvard), Professor of Education Emeritus. (1948)

Ernst Christian Helmreich, A.B. (Illinois), A.M., Ph.D. (Harvard), Thomas Brackett Reed Professor of History and Political Science Emeritus. (1931)

Charles Ellsworth Huntington, A.B., Ph.D. (Yale), Professor of Biology Emeritus. (1953)

Myron Alton Jeppesen, B.S. (Idaho), M.S., Ph.D. (Pennsylvania State), Professor of Physics and Josiah Little Professor of Natural Science Emeritus. (1936)

Helen Buffum Johnson, Registrar Emerita. (1943)

Samuel Appleton Ladd, Jr., B.S. (Bowdoin), Director of Career Counseling and Placement Emeritus. (1944)

Donovan Dean Lancaster, A.B. (Bowdoin), Director of the Moulton Union and the Centralized Dining Service Emeritus. (1927)

Eaton Leith, A.B. (Dartmouth), A.M. (Harvard), Professor of Romance Languages Emeritus. (1936)

Thomas Martin Libby, A.B. (Maine), Associate Treasurer and Business Manager Emeritus. (1961)

Matilda White Riley, A.B., A.M. (Radcliffe), Sc.D. (Bowdoin), Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita. (1973)

Thomas Auraldo Riley, A.B. (Bowdoin), A.M. (Yale), Ph.D. (Harvard), Professor of German Emeritus. (1939)

Geoffrey Robert Stanwood, B.S. (Bowdoin), Assistant to the President Emeritus. (1972)

Kathryn Drusilla Fielding Stemper, A.B. (Connecticut College), Secretary to the President Emerita. (1957)

Augustus Alven Adair, A.B. (Morehouse College), A.M. (Atlanta), Ph.D. (Johns Hopkins), Tallman Visiting Professor of Political Science for the academic year 1988-89.

- John William Ambrose, Jr.**, A.B., A.M., Ph.D. (Brown), Joseph Edward Merrill Professor of Greek Language and Literature. (On leave of absence in the spring semester.) (1966)
- Robert Andriulli**, A.B. (William Paterson College), M.F.A. (Pennsylvania State), Assistant Professor of Art. (1988)
- Shaheen Ayubi**, A.B. (St. Joseph College, Karachi), A.M. (University of Karachi), Ph.D. (University of Pennsylvania), Assistant Professor of Government. (1988)
- William Henry Barker**, A.B. (Harpur College), Ph.D. (Massachusetts Institute of Technology), Associate Professor of Mathematics. (1975)
- Susan Elizabeth Bell**, A.B. (Haverford), A.M., Ph.D. (Brandeis), Assistant Professor of Sociology. (On leave of absence in the fall semester.) (1983)
- Augusta Lynn Bolles**, A.B. (Syracuse), M.A., Ph.D. (Rutgers), Associate Professor of Anthropology and Director of the Afro-American Studies Program. (1980)
- Barbara Weiden Boyd**, B.A. (Manhattanville), M.A., Ph.D. (Michigan), Associate Professor of Classics. (1980)
- Franklin Gorham Burroughs, Jr.**, A.B. (University of the South), A.M., Ph.D. (Harvard), Associate Professor of English. (On leave of absence.) (1968)
- Samuel Shipp Butcher**, A.B. (Albion), A.M., Ph.D. (Harvard), Professor of Chemistry. (1964)
- Charles Joseph Butt**, B.S., M.S. (Springfield), Coach in the Department of Athletics and Director of the Curtis Pool. (1961)
- Helen Louise Cafferty**, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), Assistant Dean of the Faculty and Associate Professor of German. (1972)
- Steven Roy Cerf**, A.B. (Queens College), M.Ph., Ph.D. (Yale), Professor of German. (1971)
- Ronald L. Christensen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Professor of Chemistry. (1976)
- Dorothy Patricia Coleman**, A.B., A.M. (Northern Illinois), Ph.D. (Pennsylvania), Assistant Professor of Philosophy. (1984)
- David Collings**, A.B. (Pacific Union), A.M. (California, Riverside), A. LeRoy Greason Instructor in English. (1987)

- Rachel Ex Connelly**, A.B. (Brandeis), A.M., Ph.D. (Michigan), Assistant Professor of Economics and Dana Faculty Fellow. (On leave of absence.) (1985)
- Denis Joseph Corish**, B.Ph., B.A., L.Ph. (Maynooth College, Ireland), A.M. (University College, Dublin), Ph.D. (Boston University), Professor of Philosophy. (1973)
- Thomas Browne Cornell**, A.B. (Amherst), Professor of Art. (On leave of absence in the fall semester.) (1962)
- Herbert Randolph Coursen, Jr.**, A.B. (Amherst), A.M. (Wesleyan), Ph.D. (Connecticut), Professor of English. (1964)
- John D. Cullen**, A.B. (Brown), Assistant Director of Athletics. (1985)
- Judith M. Dean**, A.B. (Gordon), A.M., Ph.D. (Cornell), Assistant Professor of Economics. (1983)
- Gregory Paul DeCoster**, B.S. (Tulsa), Ph.D. (Texas), Assistant Professor of Economics. (1985)
- Sara A. Dickey**, B.A. (University of Washington), M.A. (University of California), Instructor in Anthropology. (1988)
- Patsy S. Dickinson**, A.B. (Pomona), M.S., Ph.D. (Washington), Assistant Professor of Biology. (1983)
- Joanne Feit Diehl**, B.A. (Mount Holyoke College), Ph.D. (Yale), Associate Professor of English. (1988)
- Karin Dillman**, A.B. (Pedagogische Akademie), A.M., Ph.D. (California, San Diego), Assistant Professor of Romance Languages. (1987)
- Peter E. Doan**, B.A. (St. Olaf), Visiting Assistant Professor in Chemistry. (1986)
- Linda Louise Docherty**, B.A. (Cornell), M.A. (Chicago), Ph.D. (North Carolina), Assistant Professor of Art and Dana Faculty Fellow. (1986)
- Guy T. Emery**, A.B. (Bowdoin), A.M., Ph.D. (Harvard), Professor of Physics. (1988)
- Stephen Thomas Fisk**, A.B. (California, Berkeley), A.M., Ph.D. (Harvard), Associate Professor of Mathematics. (1977)
- John M. Fitzgerald**, A.B. (Montana), M.S., Ph.D. (Wisconsin), Assistant Professor of Economics. (1983)
- Liliane P. Flöge**, A.B. (City College of New York), M.Phil., Ph.D. (Columbia), Associate Professor of Sociology. (1980)

- Albert Myrick Freeman III**, A.B. (Cornell), A.M., Ph.D. (University of Washington), Professor of Economics. (On leave of absence.) (1965)
- Alfred Herman Fuchs**, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty and Professor of Psychology. (1962)
- David K. Garnick**, B.A., M.S. (Vermont), Instructor in Computer Science and Information Studies and Dana Faculty Fellow. (1988)
- William Davidson Geoghegan**, A.B. (Yale), M.Div. (Drew), Ph.D. (Columbia), Professor of Religion. (1954)
- Timothy J. Gilbride**, A.B. (Providence), M.P.A. (American International), Coach in the Department of Athletics. (1985)
- Edmund T. Gilday**, A.B. (Wisconsin, Madison), A.M. (British Columbia), Assistant Professor in Religion. (1987)
- Jonathan Paul Goldstein**, A.B. (New York, Buffalo), A.M., Ph.D. (Massachusetts), Associate Professor of Economics. (1979)
- Celeste Goodridge**, B.A. (George Washington), M.A. (William and Mary), Ph.D. (Rutgers), Visiting Assistant Professor of English. (1986)
- Robert Kim Greenlee**, B.M., M.M. (Oklahoma), Ph.D. (Indiana), Associate Professor of Music. (1982)
- Charles Alfred Grobe, Jr.**, B.S., M.S., Ph.D. (Michigan), Professor of Mathematics. (1964)
- Anne M. Happel**, B.A. (Purdue), Instructor in Biology. (1988)
- Donald Harper**, B.A., M.A., Ph.D. (University of California-Berkeley), Assistant Professor of Asian Studies. (1988)
- Barbara S. Held**, A.B. (Douglass), Ph.D. (Nebraska), Associate Professor of Psychology. (1979)
- Thomas John Hochstettler**, A.B. (Earlham College), M.A., Ph.D. (Michigan), Dean for Planning and General Administration and Lecturer in History. (1987)
- James Lee Hodge**, A.B. (Tufts), A.M., Ph.D. (Pennsylvania State), George Taylor Files Professor of Modern Languages. (1961)
- John Clifford Holt**, A.B. (Gustavus Adolphus), A.M. (Graduate Theological Union), Ph.D. (Chicago), Associate Professor of Religion. (On leave of absence in the fall semester.) (1978)

- Roger Howell, Jr.**, A.B. (Bowdoin), B.A., M.A., D.Phil. (Oxford), LL.D. (Nasson, Colby), L.H.D. (Maine), Litt.D. (Bowdoin), William R. Kenan, Jr., Professor of Humanities. (1964)
- John LaFollette Howland**, A.B. (Bowdoin), Ph.D. (Harvard), Josiah Little Professor of Natural Science and Professor of Biology and Biochemistry. (1963)
- William Taylor Hughes**, B.S., A.M. (Indiana), Ph.D. (Northwestern), Professor of Physics and Astronomy. (1966)
- Marya Hunsinger**, A.B. (Colorado College), A.M. (Wisconsin), Visiting Instructor in Women's Studies. (1983)
- Eugene Everette Huskey, Jr.**, A.B. (Vanderbilt), A.M. (University of Essex), Ph.D. (London School of Economics and Political Science), Assistant Professor of Government. (On leave of absence.) (1983)
- Arthur Mekeel Hussey II**, B.S. (Pennsylvania State), Ph.D. (Illinois), Professor of Geology. (1961)
- Tsuyoshi Ishida**, B.A. (Hiroshima University), M.A., Ph.D. (Hiroshima University School of Education), Visiting Professor of Sociology and Asian Studies. (1988)
- Janice Ann Jaffe**, B.A. (University of the South), M.A. (Wisconsin), Instructor in Romance Languages. (1988)
- Jane L. Jervis**, A.B. (Radcliffe), A.M., M.Phil., Ph.D. (Yale), Dean of the College and Lecturer in History. (1988)
- Nancy S. Johnson**, A.B. (Kansas), Ph.D. (California, San Diego), Assistant Professor of Psychology. (1984)
- Robert Wells Johnson**, A.B. (Amherst), M.S., Ph.D. (Massachusetts Institute of Technology), Professor of Mathematics. (1964)
- Michael Jones**, A.B. (Williams), Ph.D. (Yale), Associate Professor of Economics. (1987)
- Susan Ann Kaplan**, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr), Assistant Professor of Anthropology and Director of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (1985)
- John Michael Karl**, A.B., A.M., Ph.D. (Harvard), Associate Professor of History. (1968)
- Barbara Jeanne Kaster**, A.B. (Texas Western), M.Ed. (Texas, El Paso), Ph.D. (Texas, Austin), Harrison King McCann Professor of Oral Communication in the Department of English. (1973)

- Kevin P. Kelly**, B.S. (Springfield College), M.Ed. (Southern Connecticut State), Assistant Coach in the Department of Athletics. (1988)
- Alissa G. Kerry**, B.A. (Anderson), M.A. (Michigan State), Assistant Athletic Trainer. (1988)
- David Israel Kertzer**, A.B. (Brown), Ph.D. (Brandeis), Professor of Anthropology. (1973)
- Jane Elizabeth Knox**, A.B. (Wheaton), A.M. (Michigan State), Ph.D. (Texas, Austin), Associate Professor of Russian. (On leave of absence in the spring semester.) (1976)
- Elroy Osborne LaCasce, Jr.**, A.B. (Bowdoin), A.M. (Harvard), Ph.D. (Brown), Professor of Physics. (1947)
- Katherine Lahti**, B.A. (Wesleyan), M.A. (Yale), Instructor in Russian. (1988)
- Edward Paul Laine**, B.A. (Wesleyan), Ph.D. (Woods Hole and Massachusetts Institute of Technology), Assistant Professor of Geology and Director of the Environmental Studies Program. (1985)
- Mortimer Ferris LaPointe**, B.S. (Trinity), M.A.L.S. (Wesleyan), Coach in the Department of Athletics. (1969)
- Sally Smith LaPointe**, B.S. Ed. (Southern Maine), Coach in the Department of Athletics. (1973)
- Peter D. Lea**, B.A. (Dartmouth), M.S. (Washington), Instructor in Geology. (1988)
- James Spencer Lentz**, A.B. (Gettysburg), A.M. (Columbia), Coordinator of Physical Education, the Outing Club, and Coach in the Department of Athletics. (1968)
- Daniel Levine**, A.B. (Antioch), A.M., Ph.D. (Northwestern), Thomas Brackett Reed Professor of History and Political Science. (1963)
- Maria R. Lichtmann**, A.B. (Webster), M.A. (New York University), M.A., M.Phil., Ph.D. (Yale), Assistant Professor of Religion. (1988)
- Mike Linkovich**, A.B. (Davis and Elkins), Trainer in the Department of Athletics. (1954)
- Joseph David Litvak**, A.B. (Wesleyan), M.Phil., Ph.D. (Yale), Associate Professor of English. (On leave of absence in the spring semester.) (1982)
- Burke O'Connor Long**, A.B. (Randolph-Macon), B.D., A.M., Ph.D. (Yale), Professor of Religion. (1968)

- Larry D. Lutchmansingh**, A.B. (McGill), A.M. (Chicago), Ph.D. (Cornell), Associate Professor of Art History. (On leave of absence.) (1974)
- Timothy J. Maloney**, A.B. (Wisconsin, Milwaukee), A.M., Ph.D. (Wisconsin, Madison), Assistant Professor of Economics. (1987)
- Janet Marie Martin**, B.A. (Marquette), M.A., Ph.D. (Ohio State), Assistant Professor of Government. (1986)
- Theodora Penny Martin**, B.A. (Middlebury), M.A.T. (Harvard), M.A. (Middlebury), Ed.D. (Harvard), Assistant Professor of Education. (1988)
- Michele Irene Matossian**, B.A. (Stanford), Instructor in Art. (1988)
- Dana Walker Mayo**, B.S. (Massachusetts Institute of Technology), Ph.D. (Indiana), Charles Weston Pickard Professor of Chemistry. (1962)
- O. Jeanne d'Arc Mayo**, B.S., M.Ed. (Boston University), Physical Therapist and Associate Trainer in the Department of Athletics. (1978)
- James Wesley McCalla**, B.M., A.B. (Kansas), M.M. (New England Conservatory), Ph.S. (California, Berkeley), Assistant Professor of Music. (1985)
- Craig Arnold McEwen**, A.B. (Oberlin), A.M., Ph.D. (Harvard), Professor of Sociology. (1975)
- Charles Douglas McGee**, B.S., A.M. (Northwestern), Ph.D. (Harvard), Professor of Philosophy. (On leave of absence for the spring semester.) (1963)
- John McKee**, A.B. (Dartmouth), A.M. (Princeton), Associate Professor of Art. (1962)
- Sarah Francis McMahon**, A.B. (Wellesley), Ph.D. (Brandeis), Assistant Professor of History. (1982)
- Terry A. Meagher**, A.B. (Boston University), M.S. (Illinois State), Coach in the Department of Athletics. (1983)
- Raymond H. Miller**, A.B. (Indiana), A.M., Ph.D. (Harvard), Assistant Professor of Russian. (On leave of absence for the fall semester.) (1983)
- Richard Ernest Morgan**, A.B. (Bowdoin), A.M., Ph.D. (Columbia), William Nelson Cromwell Professor of Constitutional and International Law and Government. (On leave of absence for the fall semester.) (1969)
- Zae Munn**, B.M. (Roosevelt), M.M., D.M.A. (Illinois), Assistant Professor of Music. (1986)

- Jeffrey Karl Nagle**, B.A. (Earlham), Ph.D. (University of North Carolina), Associate Professor of Chemistry. (1980)
- Robert Raymond Nunn**, A.B. (Rutgers), A.M. (Middlebury), Ph.D. (Columbia), Associate Professor of Romance Languages. (1959)
- Paul Luther Nyhus**, A.B. (Augsburg), S.T.B., Ph.D. (Harvard), Professor of History. (1966)
- Kathleen Ann O'Connor**, A.B. (Dartmouth), A.M. (Virginia), Assistant Professor of German. (1987)
- Clifton Cooper Olds**, A.B. (Dartmouth), A.M., Ph.D. (Pennsylvania), Edith Cleaves Barry Professor of the History and Criticism of Art. (1982)
- Michael King Ong**, B.S. (University of the Philippines), A.M., M.S., Ph.D. (New York, Stony Brook), Assistant Professor of Mathematics. (1984)
- David Sanborn Page**, B.S. (Brown), Ph.D. (Purdue), Professor of Chemistry and Biochemistry. (1974)
- Gayle Renee Pemberton**, B.A. (Michigan), M.A., Ph.D. (Harvard), Director of Minority Affairs and Lecturer in the Department of English. (1986)
- Carey Richard Phillips**, B.S. (Oregon State), M.S. (California, Santa Barbara), Ph.D. (Wisconsin, Madison), Assistant Professor of Biology. (On leave of absence.) (1985)
- Jananne Kay Phillips**, A.B. (Washburn), A.M. (Brown), Instructor in Sociology. (Fall 1988)
- Edward Pols**, A.B., A.M., Ph.D. (Harvard), Research Professor of Philosophy and the Humanities. (1949)
- Christian Peter Potholm II**, A.B. (Bowdoin), A.M., M.A.L.D., Ph.D. (Tufts), Professor of Government. (1970)
- Louise Pratt**, B.A. (Williams), A.M., Ph.D. (Michigan), Assistant Professor of Classics. (1988)
- Pamela S. Raabe**, B.A. (Massachusetts), M.A., Ph.D. (Boston), Assistant Professor of English. (1988)
- James Daniel Redwine, Jr.**, A.B. (Duke), A.M. (Columbia), Ph.D. (Princeton), Edward Little Professor of the English Language and Literature. (1963)
- Marilyn Reizbaum**, A.B. (Queens College), M. Litt. (University of Edinburgh), Ph.D. (Wisconsin, Madison), Assistant Professor of English. (1984)

John Cornelius Rensenbrink, A.B. (Calvin), A.M. (Michigan), Ph.D. (Chicago), Professor of Government. (1961)

Rosemary A. Roberts, B.A. (University of Reading), M.Sc., Ph.D. (University of Waterloo), Assistant Professor of Mathematics. (On leave of absence.) (1984)

Guenther Herbert Rose, B.S. (Tufts), M.S. (Brown), Ph.D. (California, Los Angeles), Associate Professor of Psychology. (On leave of absence.) (1976)

Daniel Walter Rossides, A.B., Ph.D. (Columbia), Professor of Sociology. (On leave of absence for the fall semester.) (1968)

Lynn Margaret Ruddy, B.S. (Wisconsin, Oshkosh), Assistant Director of Athletics. (1976)

Giulianella Ruggiero, D.L.F. (University of Rome), Instructor in Romance Languages. (1988)

Abram Raymond Rutan, A.B. (Bowdoin), M.F.A. (Yale), Director of Theater in the Department of Theater Arts. (1955)

Wendy R. Salmond, B.A. (University of Otago-New Zealand), M.A. (Texas), Instructor in Art History. (1988)

Mark Sandona, B.A. (Northwestern), Instructor in English. (1988)

Paul Eugene Schaffner, A.B. (Oberlin), Ph.D. (Cornell), Associate Professor of Psychology. (1977)

Elliott Shelling Schwartz, A.B., A.M., Ed.D. (Columbia), Professor of Music. (On leave of absence in the spring semester.) (1964)

Carl Thomas Settlemyre, B.S., M.S. (Ohio State), Ph.D. (North Carolina State), Associate Professor of Biology and Chemistry. (1969)

Harvey Paul Shapiro, B.S. (Connecticut), M.Ed. (Springfield), Coach in the Department of Athletics. (1983)

William Davis Shipman, A.B. (University of Washington), A.M. (California, Berkeley), Ph.D. (Columbia), Research Professor of Economics. (1957)

Lawrence Hugh Simon, A.B. (Pennsylvania), B.A. (Oxford), M.A./B.A. (Cambridge), Ph.D. (Boston University), Visiting Assistant Professor of Philosophy. (1987)

Peter Slovenski, A.B. (Dartmouth), A.M. (Stanford), Coach in the Department of Athletics. (1987)

- Melinda Yowell Small**, B.S., A.M. (St. Lawrence), Ph.D. (Iowa), Associate Professor of Psychology. (1972)
- David Neel Smith**, A.B. (Harvard), A.M., Ph.D. (California, Berkeley), Assistant Professor in Archaeology in the Department of Classics. (1987)
- G. E. Kidder Smith, Jr.**, A.B. (Princeton), Ph.D. (California, Berkeley), Associate Professor of History. (1981)
- Philip Hilton Soule**, A.B. (Maine), Coach in the Department of Athletics. (1967)
- Allen Lawrence Springer**, A.B. (Amherst), A.M., M.A.L.D., Ph.D. (Tufts), Associate Professor of Government. (1976)
- Randolph Stakeman**, A.B. (Wesleyan), A.M., Ph.D. (Stanford), Associate Professor of History. (1978)
- William Lee Steinhart**, A.B. (Pennsylvania), Ph.D. (Johns Hopkins), Associate Professor of Biology. (On leave of absence.) (1975)
- Elizabeth A. Stemmler**, B.S. (Bates), Ph.D. (Indiana), Assistant Professor of Chemistry. (1988)
- William C. Strange**, A.B. (Oregon), A.M., Ph.D. (Princeton), Assistant Professor in Economics. (1987)
- Françoise Dupuy Sullivan**, Maîtrise (Université de Bordeaux), A.M. (Washington, Seattle), Ph.D. (California, Irvine), Assistant Professor of Romance Languages. (On leave of absence in the spring semester.) (1985)
- Dale A. Syphers**, B.S., M.Sc. (Massachusetts), Ph.D. (Brown), Assistant Professor of Physics. (1986)
- Clifford Ray Thompson, Jr.**, A.B., A.M., Ph.D. (Harvard), Professor of Romance Languages. (1961)
- Peter Keim Trumper**, A.B. (St. Olaf), Ph.D. (Minnesota), Assistant Professor of Chemistry and Dana Faculty Fellow. (1985)
- Allen B. Tucker, Jr.**, B.A. (Wesleyan), M.S., Ph.D. (Northwestern), Professor of Computer Science and Information Studies. (1988)
- James Henry Turner**, A.B. (Bowdoin), B.S., M.S., Ph.D. (Massachusetts Institute of Technology), Associate Professor of Physics. (1964)
- John Harold Turner**, M.A. (St. Andrews, Scotland), A.M. (Indiana), Ph.D. (Harvard), Professor of Romance Languages. (1971)
- David Jeremiah Vail**, A.B. (Princeton), A.M., M.Phil., Ph.D. (Yale), Professor of Economics. (1970)

June Adler Vail, A.B. (Connecticut), M.A.L.S. (Wesleyan), A. LeRoy Grea-
son Assistant Professor of Dance in the Department of Theater Arts and
Director of the Dance Program. (1987)

Howard S. Vandersea, A.B. (Bates), M.Ed. (Boston University), Coach in
the Department of Athletics. (1984)

William Chace VanderWolk, A.B. (North Carolina), A.M. (Middlebury),
Ph.D. (North Carolina), Assistant Professor of Romance Languages.
(1984)

James Edward Ward III, A.B. (Vanderbilt), A.M., Ph.D. (Virginia), Pro-
fessor of Mathematics. (1968)

Sidney John Watson, B.S. (Northeastern), Director of Athletics. (1958)

William Collins Watterson, A.B. (Kenyon), Ph.D. (Brown), Associate
Professor of English. (1976)

Susan Elizabeth Wegner, A.B. (Wisconsin, Madison), A.M., Ph.D. (Bryn
Mawr), Associate Professor of Art History. (1980)

Marcia Anne Weigle, B.A., M.A., Ph.D. (Notre Dame), Assistant Profes-
sor of Government. (1988)

Allen Wells, B.A. (SUNY-Binghamton), M.A., Ph.D. (SUNY-Stony
Brook), Assistant Professor of History. (1988)

Eric Werner, B.S., Ph.D. (Wisconsin, Madison), Assistant Professor of
Computer Science and Information Studies. (On leave of absence.) (1985)

Mark Christian Wethli, B.F.A., M.F.A. (University of Miami), Associate
Professor of Art. (On leave of absence.) (1985)

Nathaniel Thoreau Wheelwright, B.S. (Yale), Ph.D. (Washington),
Assistant Professor of Biology. (1986)

William Bolling Whiteside, A.B. (Amherst), A.M., Ph.D. (Harvard),
Frank Munsey Professor of History. (1953)

Jay A. Wood, A.B. (Notre Dame), M.A., Ph.D. (Berkeley), Assistant Profes-
sor of Mathematics. (1986)

Tsung-Hsien Yang, B.A. (Tunghai University), M.A. (California),
M.F.A., Ph.D. (Brandeis), Visiting Assistant Professor of Music. (1988)

Jean Yarbrough, B.A. (Cedar Crest College), M.A., Ph.D. (New School for
Social Research), Professor of Government and Legal Studies. (1988)

COMMITTEES OF THE FACULTYLUCIE G. TEEGARDEN, *Faculty Clerk*

Academic Computing Center: Mr. Schaffner, *Chair*; the Dean of Planning, Chair of Computer Science and Information Studies Department; Manager of Academic Computing, Messrs. D. N. Smith, G. E. K. Smith, and Trumper. Undergraduates: Asaf M. Farashuddin '89 and Brett L. Wickard '90. Alternate: one to be named.

Administrative: The President, *Chair*; the Dean of the College, the Dean of Students, the College Physician, Mr. Christensen, Ms. Dillman, Ms. Pemberton and Mr. Vandersea. Undergraduates: Anne A. Gannon '89, Mitchell A. Price '89, and Robert H. Smith '91.

Admissions: Mr. Levine, *Chair*; the Dean of the College, the Director of Admissions, Messrs. Cullen, Fisk, Ms. Goodridge, and Mr. Olds. Undergraduates: Anne M. St. Peter '89 and Mitchell A. Price '89. Alternate: Lisa D. Kane '90.

Afro-American Studies: Mr. Kertzer, *Chair*; the Dean of Students, the Director of Afro-American Studies, Messrs. Collings, Goldstein, Laine, Ms. Martin, and Mr. Simon. Undergraduates: Elizabeth Millan '90 and four to be named.

Athletics: Mr. Johnson, *Chair*; the Dean of the College, the Director of Athletics, Ms. Bolles, Mr. Fitzgerald, and Mr. Watterson. Undergraduates: Robert H. Smith '91 and Edward M. Daft '89. Alternate: Elizabeth R. Brown '90.

Committee on Committees: Mr. Cerf (1989), *Chair*; the Dean of the Faculty, Mr. Christensen (1990), Ms. Docherty (1989), Mr. Kertzer (1991), Ms. Martin (1990), and Mr. Wheelwright (1989).

Curriculum and Educational Policy: The President, *Chair*; the Dean of the College, the Dean of the Faculty, Ms. Boyd, *Secretary*, Ms. Dean, Ms. Docherty, Messrs. Hodge, Page and Stakeman. Undergraduates: Kirsten L. Ek '90 and Mitchell A. Price '89. Alternate: Scott A. Mendel '90.

Environmental Studies: Mr. Vail, *Chair*; the Director of Environmental Studies, Ms. Dickinson, Messrs. McKee, Ong, Rensenbrink, and Mr. James Turner. Undergraduates: Katherine S. LaPine '90, Michael J. Sacapulos '91, and Cheryl B. Schultz '91. Alternate: Robert F. Coen '90.

Faculty Affairs: Mr. Howell (1990), *Chair*; the Dean of the Faculty, Ms. Kaplan (1989), Ms. Kaster (1991), Mr. Springer (1990), Ms. Wegner (1991), Mr. Ward (1989), and Mr. Wheelwright (1990).

Faculty Research: Mr. John Turner, *Chair*; the Dean of the Faculty, Mr.

Barker (Faculty Development Fund), Ms. Bell (second semester) (Surdna Research Fellowships), Messrs. Long (Course Development Fund), Nagle (Faculty Research Fund), and Ms. Reizbaum (Koelln Research Fund, Undergraduate Instructional Fellowships, and Langbein Summer Research Fellowships).

Grievance (Sex): Mr. Cerf, *Chair*; Ms. Held, Mr. Long, Ms. McMahon, and Mr. Settlemire. Alternates: Mr. Grobe and Ms. Small.

Human and Animal Research: Mr. Corish, *Chair*; the Dean of the Faculty, Mr. Grobe, Ms. McEnroe, Messrs. Morgan (second semester), Syphers, Herbert Paris and R. S. Youmans, D.V.M.

Lectures and Concerts: Ms. Watson, *Chair*; the Dean of the College, Messrs. Jones, McCalla, Ms. O'Connor, Messrs. Simon and Wood. Undergraduates: Gwen E. Kay '91 and Kenneth A. Weisbrode '91. Alternate: one to be named.

Library: Mr. Nyhus, *Chair*; the Librarian, Ms. Coleman, Messrs. Greenlee, Redwine, and Trumper. Undergraduates: Richard A. Krasuki '90 and Kenneth A. Weisbrode '91. Alternate: one to be named.

Oversight Committee on Minority Affairs: Ms. Bolles, *Chair*; Director of Minority Affairs (*ex officio*), Messrs. Coursen, Olds, and Strange. Undergraduate: one to be named from the Afro-American Society.

Recording: The Dean of the College, *Chair*; the Dean of Students, the Registrar, Mr. Cerf, Ms. Dickinson, Messrs. Gilday and Karl. Undergraduates: Juliet N. Boyd '91 and Asaf M. Farashuddin '89. Alternate: James S. Harrop, Jr. '90.

Scholarship: The Dean of the College, *Chair*; the Director of Student Aid, Messrs. Coursen, DeCoster, Howland, Ms. Johnson, and Mr. Nunn.

Studies in Education: Ms. Floge, *Chair*; Messrs. Barker, McEwen, Syphers, and Ms. Vail.

Student Activities Fee: Mr. Thompson, *Chair*; the Assistant Dean of Students, Ms. Johnson, and Mr. McCalla. Undergraduates: four to be named.

Student Awards: Mr. LaCasce, *Chair*; Ms. LaPointe, Messrs. Maloney, McGee, Ms. Munn, and Mr. Potholm.

Student Life: The Dean of Students, *Chair*; the Director of the Moulton Union, Ms. Dickinson, Ms. Dillman, Mr. Meagher, Mr. Settlemire, and Mr. Strange. Undergraduates: four to be named. Alternates: two to be named.

Upward Bound: Mr. Hussey, *Chair*; the Dean of the College, the Director of Upward Bound, Messrs. Geoghegan, Hughes, Robinson, Rossides (second semester), Ms. Ruddy, and Mr. Schwartz (first semester). Undergraduates: Juliet N. Boyd '91 and Elizabeth G. Yarnell '91.

Women's Studies: Ms. Cafferty, *Chair*; Ms. Floge, Ms. Hunsinger, *ex officio*; Ms. McMahon, Mr. VanderWolk, and Mr. Rensenbrink. Undergraduates: two to be named. Alternates: two to be named.

BOARD ON SEXUAL HARASSMENT

Mr. Johnson (1991), Ms. Kaster (1990), Mr. Mersereau (1990), and Ms. Underwood (1991). Undergraduates: Gregory S. Merrill '90 and Ann St. Peter '89. Alternates: Ms. Goodridge (1991), Mr. Litvak (1990), Ms. Ruth Peck (1990), Mr. Sammie Robinson (1991). Undergraduate alternates: two to be named.

Adjunct Faculty

Susan M. L. Anderson, A.B. (Bowdoin).

Lauren Bartlett, B.S. (Trinity), Laboratory Instructor in Chemistry.

Corinne Beaujard, Teaching Fellow in French in the Department of Romance Languages.

Rene L. Bernier, B.S. (Maine), Laboratory Instructor in Chemistry.

Gerald F. Bigelow, B.A. (Columbia College), Ph.D. (University of Cambridge), Visiting Lecturer in Anthropology and Curator/Registrar of the Peary-MacMillan Arctic Museum and Arctic Studies Center. (Fall 1988)

Pamela Jean Bryer, B.S., M.S. (Rensselaer Polytechnic Institute), Laboratory Instructor in Biology.

Norman Chonacky, B.A. (John Carroll University), Ph.D. (Wisconsin), Research Associate in the Department of Physics.

Stephen Crawford, B.A. (Cornell), M.B.A. (Wharton), Ph.D. (Columbia), Research Associate in Sociology.

Beverly Ganter DeCoster, B.S. (Dayton), Laboratory Instructor in the Department of Chemistry.

Orlando E. Delogu, B.S. (Utah), M.S., J.D. (Wisconsin), Visiting Professor of Environmental Studies. (Fall 1988)

Deng Lin-Yu (Beijing Foreign Languages Institute), Visiting Professor in Chinese. (1988)

Laurence Dubosclard, Teaching Fellow in French. (1988)

Paulette Messier Fickett, A.B. (Maine, Presque Isle), Laboratory Instructor in Chemistry.

Judith Cooley Foster, A.B. (Brown), A.M. (Rhode Island), Laboratory Instructor in Chemistry and Director of Laboratories.

Alan Garfield, A.B. (New Hampshire), Laboratory Instructor in Biology.

Richard Gelwick, B.A. (Southern Methodist), M.Div. (Yale), Th.D. (Pacific School of Religion and Graduate Theological Union), Research Associate in Religion.

Edward Smith Gilfillan III, A.B. (Yale), M.Sc., Ph.D. (British Columbia), Lecturer in Environmental Studies and Adjunct Professor of Chemistry.

Christopher C. Glass, A.B. (Haverford), M.Arch. (Yale), Visiting Lecturer in Art. (Spring 1989)

Fujiko Hotta, B.A. (Sacred Heart Women's University), Visiting Lecturer in Japanese.

George Steven Isaacson, B.A. (Bowdoin), J.D. (University of Pennsylvania), Visiting Lecturer in Government. (1988)

Erik C. Jorgensen, Fellow in Studio Art Division.

Gerald F. McGee, Director of Chorale.

Sanern Okurdil, Teaching Fellow in German.

Rosa Pellegrini, Diploma Magistrale (Istituto Magistrate "Imbriani" Avellino), Lecturer in Italian.

Leonardo Peusner, BSEE (Massachusetts Institute of Technology), Ph.D. (Harvard), Research Associate in Biology.

David L. Roberts, A.B. (Bowdoin), Ph.D. (Case Western Reserve), Teaching Associate in Physics.

Michael Paul Roderick, A.B. (Maine), Theater Technician.

Maria Immaculada Sánchez Vincente, Teaching Fellow in Spanish. (1988)

Leah G. Shulsky, M.A. (Moscow Pedagogical Institute), Mellon Fellow in Russian.

Deborah Anne Soifer, A.B. (George Washington), A.M., Ph.D. (Chicago, The Divinity School), Visiting Lecturer in Sanskrit.

Mary-Agnes Wine, A.B., A.M. (Mount Holyoke), Laboratory Instructor in Biology. (Spring 1988)

Laurie Wunder, A.B. (Binghamton), A.M. (Montana), Ph.D. (Colorado State), Laboratory Instructor in Biology.

Xiao-hui Xu, Teaching Assistant for Chinese Languages. (1988)

Clarice M. Yentsch, B.S., M.S. (Wisconsin, Madison), Ph.D. (Nova), Adjunct Professor of Chemistry.

Officers of Administration

GENERAL ADMINISTRATION

Arthur LeRoy Greason, A.B. (Wesleyan), A.M., Ph.D. (Harvard), D. Litt. (Wesleyan), President.

Sarah Jane Bernard, B.S. (Bates), C.M.A. (Laban Institute of Movement Studies), Registrar.

Helen Louise Cafferty, A.B. (Bowling Green), A.M. (Syracuse), Ph.D. (Michigan), Assistant Dean of the Faculty.

Alfred Herman Fuchs, A.B. (Rutgers), A.M. (Ohio), Ph.D. (Ohio State), Dean of the Faculty.

Thomas John Hochstettler, A.B. (Earlham College), M.A., Ph.D. (Michigan), Dean for Planning and General Administration.

Jane L. Jervis, A.B. (Radcliffe), A.M., M.Phil., Ph.D. (Yale), Dean of the College.

Kenneth Adell Lewallen, B.S. (Texas A. and M.), M.A., Ph.D. (Kansas State), Dean of Students.

Gayle Renee Pemberton, B.A. (Michigan), M.A., Ph.D. (Harvard), Director of Minority Affairs.

Richard F. Seaman, B.A. (Oberlin), M.A. (Western Reserve), Vice President for Development.

Janet B. Smith, A.B. (Wells), A.M., M.Lib.Stud. (Boston University), Assistant to the President, Affirmative Action Officer.

Dudley Hawthorne Woodall, A.B. (Amherst), M.B.A. (Pittsburgh), Treasurer.

ADMISSIONS OFFICE

William Robert Mason III, A.B. (Bowdoin), Director.

Leon Melvin Braswell III, A.B. (Massachusetts), Assistant Director.

Margaret Edison Dunlop, A.B. (Wellesley), Associate Director.

Janet Anne Lavin, A.B. (Williams), M.S. (Stanford), Associate Director.

Sammie Timothy Robinson, A.B. (Bowdoin), A.M. (Smith), Associate Director.

Officers of Administration

Heidi Jean Heal, A.B. (Bowdoin), Admissions Counselor.

Kelly Susan McKinney, A.B. (Bowdoin), Admissions Counselor.

ATHLETICS

Sidney John Watson, B.S. (Northeastern), Director of Athletics.

John Cullen, A.B. (Brown), Assistant Director.

Lynn M. Ruddy, B.S. (Wisconsin-Oshkosh), Assistant Director.

AUDIOVISUAL SERVICES

James Alan Clayman, Technician.

BETHEL POINT MARINE RESEARCH STATION

Edward Smith Gilfillan III, A.B. (Yale), M.S., Ph.D. (British Columbia),
Director.

CAREER SERVICES

Harry Knight Warren, A.B. (Pennsylvania), Director.

Nicolette de Bruyn, A.B. (Bowdoin), Intern.

Susan Deland Livesay, A.B. (Smith), Career Counselor.

Ann Semansco Pierson, A.B. (Bowdoin), Director of Programs in
Teaching and Coordinator of Voluntary Services.

Jayne Helen Rowe, A.B. (Bowdoin), Acting Assistant Director.

CENTRALIZED DINING SERVICE

Laurent Conrad Pinette, Director.

Orman Hines, Purchasing Agent.

Tenley Hummel, Acting Financial and Accounting Supervisor.

Mary Lou McAteer Kennedy, R.D., B.S. (Vermont), A.M. (Framingham
State), Assistant Director.

CHEMISTRY LABORATORIES

Judith Cooley Foster, A.B. (Brown), M.S. (Rhode Island), Coordinator of
Laboratories.

DUDLEY COE HEALTH CENTER

Roy Edward Weymouth, Jr., A.B. (Bowdoin), M.D. (Tufts), College Physician.

Robin Lewis Beltramini, B.A. (College of the Atlantic), M.S. (Pace), Gynecologic Nurse Practitioner.

Ian F. M. Buchan, A.B. (New Hampshire), Physician's Assistant.

COMPUTING CENTER

Myron Whipple Curtis, A.B. (Bowdoin), A.M. (California, Los Angeles), Director.

Harry J. Hopcroft, Jr., A.B. (Brown), M.B.A. (Adelphi), Microcomputer User Specialist.

Thaddeus Tibbetts Macy, A.B. (Maine), Administrative Applications Coordinator.

Mark Ingwald Nelsen, A.B. (California, Berkeley), Associate Director.

Carol Arlita Flewelling O'Donnell, A.B. (Maine), Administrative Applications Coordinator.

Stephen G. Smith, A.B. (Colby), M.B.A. (Maine), Manager of Administrative Computing.

Amy Lisette Thompson, A.B. (Bowdoin), Administrative Applications Coordinator.

COUNSELING SERVICE

Beverly Prosser Gelwick, B.S. (Temple), Ph.D. (Missouri), Director of Counseling Services.

Kathleen Brown, A.B. (SUNY-Old Westbury), M.S. (Columbia), College Counselor.

Michaelanne Rosenzweig, A.B. (Mount Holyoke), M.S.W. (Simmons), College Counselor.

Robert C. Vilas, A.B., M.Ed. (St. Lawrence), College Counselor.

**DEAN FOR PLANNING AND
GENERAL ADMINISTRATION**

Thomas John Hochstettler, A.B. (Earlham College), M.A., Ph.D. (Michigan), Dean for Planning and General Administration.

DEAN OF STUDENTS OFFICE

Kenneth Adell Lewallen, B.S. (Texas A. and M.), M.A., Ph.D. (Kansas State), Dean of Students.

Ana Marquez Brown, A.B. (Reed), M.S. (Wisconsin-Madison), Assistant Dean of Students.

Bina Lilly Chaddha, A.B. (Bowdoin), Freshman Advisor.

William J. Fruth, A.A. (East Los Angeles), B.S. (San Diego State), A.M. (West Virginia), Student Activities Coordinator.

DEVELOPMENT OFFICE

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Martha Jane Adams, Assistant Director of Alumni Relations.

Mary Crowley Bernier, Assistant to the Vice President for Development.

Linda A. Blanchard, Development Office Intern.

Margaret Ann Brown, A.B. (Kalamazoo), Assistant Director of Annual Giving.

Charles Credille Calhoun, A.B. (Virginia), B.A., M.A. (Oxford), Editor, *Bowdoin Alumni Magazine*.

Robert Melvin Cross, A.B. (Bowdoin), A.M. (Harvard), Secretary of the College.

Josiah Hayden Drummond, Jr., A.B. (Colby), M.Ed. (Maine), Director of Planned Giving.

Marilyn Nelson McIntyre, A.B. (Grinnell), M.P.A. (Pennsylvania State), Director of Information Records and Systems.

Katherine L. Mills, A.B. (Smith), Assistant Director of Prospect Research.

Susan R. Moore, A.B. (Maine), M.L.S. (Syracuse), Director of Prospect Research.

Albert Richard Smith II, A.B. (Trinity), Director of Annual and Reunion Giving.

Anne Wohltman Springer, A.B. (Bowdoin), Director of Alumni Relations.

ENVIRONMENTAL STUDIES

Becky Koulouris, B.S. (Maine), Program and Course Assistant.

EVENTS OFFICE

Anne Underwood, A.B. (The College of Wooster), M.S. (Ohio State),
Director.

HAWTHORNE-LONGFELLOW LIBRARY

Arthur Monke, A.B. (Gustavus Adolphus), M.S. in L.S. (Columbia),
Librarian.

Dianne Molin Gutscher, B.S. (Pratt Institute), Curator of Special
Collections.

John Bright Ladley, B.S. (Pittsburgh), M.L.S. (Carnegie Institute of Tech-
nology), Public Services Librarian.

Priscilla Hubon McCarty, A.B. (Brown), M.L.S. (Maine), Catalog
Librarian.

Judith Reid Montgomery, A.B. (Valparaiso), M.L.S. (Kent State), Assist-
ant Librarian.

Leanne N. Pander, B.A. (Daemen), M.L.S. (Rhode Island), Reference
Librarian.

Shirley A. Reuter, A.B. (New Hampshire), M.L.S. (Syracuse), Acquisitions
Librarian.

Donna Glee Sciascia, A.B. (Emporia), M.A. in L.S. (Denver), Head, Cata-
log Department.

Anne Haas Shankland, A.B. (Ohio Wesleyan), M.L.S. (Florida State), Art
Librarian.

Sydney Morgan Steinhart, B.S. (Lebanon Valley), M.L.S. (Pittsburgh),
Reference/Catalog Librarian.

Elda Gallison Takagi, B.S., A.M. (Maine), A.M., M.A. in L.S. (Michi-
gan), Documents Librarian.

Yuan Yao, B.A. (Xiamen), M.L.S. (Illinois), Catalog Librarian.

Lynda Kresge Zendzian, B.A., M.A. (Tufts), M.L.S. (Rhode Island), Cata-
log Librarian.

LANGUAGE MEDIA CENTER

Carmen M. Greenlee, Supervisor.

MINORITY AFFAIRS

Gayle Renee Pemberton, B.A. (Michigan), M.A., Ph.D. (Harvard),
Director.

MOULTON UNION

Harry Knight Warren, A.B. (Pennsylvania), Director.

Robert Thomas Santry (Southern Maine), Bookstore Manager.

MUSEUM OF ART

Katharine Johnson Watson, A.B. (Duke), A.M., Ph.D. (Pennsylvania),
Director.

Henrietta McBee Tye, B.S. (Simmons), M.Ed. (Wheelock), A.M. (Syracuse), Ph.D. (North Carolina, Chapel Hill), Registrar.

Roxlyn Towle Yanok, Administrative Assistant to the Director.

MUSIC

Barbara Lillian Whitepine, A.B. (Colby), Administrative Assistant.

PHYSICAL PLANT

David Newton Barbour, B.S. (Maine), M.B.A. (Southern Maine),
Director.

Patti Jean Hinkley, A.S., B.S. (Maine), Engineer.

Leo Paquin, Superintendent of Custodial Services.

George Paton, B.S. (Massachusetts, Amherst), Assistant Director.

Philip A. Sargent, B.S. (Maine), M.F. (Yale), College Forester.

Howard Ewing Whalin, Superintendent of Brunswick Apartments.

**PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC
STUDIES CENTER**

Susan Ann Kaplan, A.B. (Lake Forest), A.M., Ph.D. (Bryn Mawr),
Director.

Gerald Frederick Bigelow, A.B. (Columbia), Ph.D. (Cambridge), Curator/
Registrar.

PUBLIC RELATIONS AND PUBLICATIONS

Richard Alan Mersereau, A.B. (Bowdoin), M.A.T. (Wesleyan), Director.

Joseph Edward Beninati, A.B. (Bowdoin), Public Relations/Sports Information Intern.

Tatiana Bernard, B.A., M.A. (Michigan), Assistant Director.

Dan Cathriel Shapiro, A.B. (Bowdoin), News Director.

Lucie Giegengack Teegarden, A.B. (College of New Rochelle), A.M. (Yale), Associate Director.

REGISTRAR

Sarah Jane Bernard, B.S. (Bates), C.M.A. (Laban Institute of Movement Studies), Registrar.

SECURITY

Michael S. Pander, B.S. (Charter Oak College), Director of Security.

STUDENT AID OFFICE

Walter Henry Moulton, A.B. (Bowdoin), Director.

TREASURER'S OFFICE

Dudley Hawthorne Woodall, A.B. (Amherst), M.B.A. (Pittsburgh), Treasurer.

Pauline Paquet Farr, Director of Computer Services-Accounting.

Caroline B. Garcia, B.S., M.Ed. (Kent State), Ph.D. (Boston College), Director of Personnel.

James Packard Granger, B.S. (Boston University), C.P.A., Controller.

Thomas Joseph Mallon, Accounting Office Manager.

Betty Mathieson Massé, Assistant to the Treasurer.

Michelle A. McDonough, A.B. (Keuka College), Chief Cashier.

Frederick J. Quivey, A.B. (Maine), M.B.A. (New Hampshire), Director of Budgets.

Bette Spettel, B.A., M.Ed. (Wheelock College), Director of the Children's Center.

Martin F. Szydlowski, B.S. (Providence College), Assistant Controller.

Barbara MacPhee Wyman, Supervisor of the Service Bureau.

UPWARD BOUND

Doris Charrier Vladimiroff, A.B. (Duke), A.M. (Middlebury), Project Director.

Ludger Hilaire Duplessis, A.B. (Bowdoin), Assistant Director.

Scott William Bradley, A.B. (Maine), Counselor.



BOWDOIN ADMINISTRATIVE STAFF STEERING COMMITTEE

(*Chair to be selected*); Patti-Jean Hinckley, *Vice Chair*; Sarah J. Bernard, *Secretary*; Richard A. Mersereau, Judith R. Montgomery, Mark I. Nelson, Ann S. Pierson, and Janet B. Smith, Assistant to the President, *ex officio*.

Campus and Buildings

BOWDOIN IS LOCATED in Brunswick, Maine, a town of approximately 20,500 population, first settled in 1628, on the banks of the Androscoggin River, a few miles from the shores of Casco Bay. The campus, originally a sandy plain covered with blueberries and pines, is a tract of 110 acres containing more than fifty buildings and several playing fields.

Massachusetts Hall is the oldest building on the campus, having been completed in 1802. For several years it housed the students, and all classes were held there. Now used for faculty offices, the building was designated a Registered Historical Landmark in 1971. The entire campus became part of the Federal Street Historic District in 1976.

The work of the College has its heart and center in Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, which contains the accumulations of over a century and a half. The nucleus of its 725,000 volumes is the collection of books and pamphlets bequeathed by James Bowdoin. These "Bowdoin Books," rich in French literature, American history, and mineralogy, were supplemented by the same generous benefactor's gift of an art collection containing many paintings of old and modern masters. Among the paintings are the portraits of Thomas Jefferson and James Madison by Gilbert Stuart, and a notable collection of portraits by the distinguished colonial artist Robert Feke.

Classes are held in Adams, Banister, Cleaveland, Gibson, Hubbard, and Sills halls, the Afro-American Center, Coles Tower, Searles Science Building, Smith Auditorium, and the Visual Arts Center. When students are not engaged in academic work, they have at their disposal many well-equipped recreational facilities. These include the Dayton Arena, Morrell Gymnasium, Moulton Union, Pickard Field House, Sargent Gymnasium, Farley Field House, and thirty-five acres of playing fields. Another valuable adjunct for the health of the student is the Dudley Coe Health Center.

COLLEGE BUILDINGS

Seth Adams Hall, designed by Francis H. Fassett, was erected in 1860-1861 and named in honor of Seth Adams, a sugar refiner from Boston, who contributed liberally toward its construction. From 1862 until 1921 it housed the classrooms of the Medical School of Maine. It now houses the Smyth Mathematical Library, named in memory of William Smyth, of the Class of 1825, who was professor of mathematics from 1828 to 1868. The building also contains classrooms, lecture rooms, and the offices of the Department of Mathematics. It stands west of the President's Gateway.

Appleton Hall (1843), designed and built by Samuel Melcher and Sons

and named in memory of the second president of the College; **Coleman Hall** (1938), designed by McKim, Mead & White and named in honor of the family of the donor, Jane Coleman Pickard (Mrs. Frederick W. Pickard); **Hyde Hall** (1917), designed by Allen and Collens and named in memory of the seventh president of the College; **Maine Hall** (1808), designed and built by Anthony C. Raymond, known originally as "the College," and named later to commemorate the admission of Maine to the Union; **Moore Hall** (1941), designed by McKim, Mead & White and named in honor of his father by the donor, Hoyt Augustus Moore, LL.D., of the Class of 1895; and **Winthrop Hall** (1822), designed and built by Samuel Melcher III and named in memory of Governor John Winthrop of the Massachusetts Bay Colony, are the six campus dormitories. In 1964-1966 the interiors of Appleton, Maine, and Winthrop were completely renovated.

Ashby House, located on Maine Street across from Hawthorne-Longfellow Library, was the home of the Reverend Thompson E. Ashby, for many years minister of the First Parish Church, and Mrs. Ashby. It has been used over the years as a faculty residence, eating hall, and student dormitory. It was renovated in 1974 and currently houses the Department of Sociology and Anthropology.

Baxter House, at 10 College Street, was purchased in 1971 and is used as a student residence. For nearly twenty years it was the chapter house of Delta Psi of Sigma Nu, which established a scholarship fund at the College with the proceeds from the sale. Named for the Baxter family in recognition of its many contributions to Bowdoin and the State of Maine, it was designed by Chapman and Frazer and built by Hartley C. Baxter, of the Class of 1878, one of five Baxters to serve on the Governing Boards and stepbrother of Percival P. Baxter, of the Class of 1898, governor of Maine from 1921 to 1925.

Burnett House, 232 Maine Street, was built in 1858 for Mr. Henry Martin, a grocer and later president of the Pejepscot Bank. In 1919 it was purchased by Charles T. and Sue Winchell Burnett. Professor Burnett was chairman of the Department of Psychology and a member of the faculty for forty-two years until his retirement in 1944; Mrs. Burnett, a cellist, took part in many musical productions on campus. From 1965 to 1970 Burnett House was home to the Phi Delta Psi fraternity. The College acquired it in 1972, and it is now a residence for students. There is a printmaking studio for the Department of Art in the ell.

Chamberlain Hall, designed by Hugh Stubbins and constructed in 1964, was named in memory of General Joshua Lawrence Chamberlain, LL.D., of the Class of 1852, Civil War hero, governor of Maine, and president of Bowdoin from 1871 to 1883. It houses the Admissions Office.

The Chapel, a Romanesque church of undressed granite designed by

Richard Upjohn, was built during the decade from 1845 to 1855 from funds solicited from private donors and received from the Bowdoin estate. The façade is distinguished by twin towers and spires which rise to the height of 120 feet. The interior resembles the plan of English college chapels, with a broad central aisle from either side of which rise the ranges of seats. The lofty walls are decorated with twelve large paintings. The Chapel stands as a monument to President Leonard Woods, fourth president of the College, under whose personal direction it was erected. The flags are of the original thirteen colonies plus Maine, which was a part of Massachusetts at the time of the founding of the College in 1794. A set of eleven chimes, the gift of William Martin Payson, of the Class of 1874, was installed in the southwest tower in 1923. In the Chapel is an organ given in 1927 by Cyrus H. K. Curtis, LL.D.

That portion of the building that formerly housed the reading rooms and stack space of the college library was named **Banister Hall** in 1850 in recognition of the gifts of Mrs. Sarah Hale, the daughter of the Honorable William Banister. It contains the offices, classrooms, and laboratories of the Department of Psychology. The human psychobiology laboratory is named in honor of psychologist Harry Helson, Ph.D., of the Class of 1921.

Chase Barn Chamber, named in memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature from 1925 to 1951, and Mrs. Chase, is a handsome room located in the ell of the **Johnson House**. Designed by Felix Arnold Burton, of the Class of 1907, in the Elizabethan style, the chamber is heavily timbered, contains a small stage and an impressive fireplace, and houses many of the books from the Chase library. It is used for small classes, seminars, and conferences.

Parker Cleaveland Hall, designed by McKim, Mead & White, was dedicated in 1952. The building was made possible by donors to the Sesquicentennial Fund. It houses the Department of Chemistry and bears the name of Parker Cleaveland, who taught chemistry and mineralogy at Bowdoin from 1805 to 1858 and was a pioneer in geological studies. Special gifts provided the Kresge Laboratory of Physical Chemistry, the Wentworth Laboratory of Analytical Chemistry, the 1927 Room (a private laboratory), the Adams Lecture Room, the Burnett Room (a seminar room), and the Dana Laboratory of Organic Chemistry.

Dudley Coe Health Center is a three-story brick building erected in 1916-1917. It was designed by Allen and Collens and given by Thomas Upham Coe, M.D., of the Class of 1857, in memory of his son, and stands in the pines to the south of the Hyde Athletic Building. In 1957 it was enlarged through a gift by Agnes M. Shumway, A.M. (Mrs. Sherman N. Shumway). In 1962 it was licensed by the state as a private general hospital. An addition

was built in 1974 to provide additional space for patient care. The second floor houses the offices of the Gynecological Services; the third floor the Counseling Service. The Service Bureau is located in the basement.

Coles Tower, designed by Hugh Stubbins, was completed in 1964 and served for several years as the residential unit of the Senior Center. After the Senior Year Program was ended in 1979, the sixteen-story tower was named in honor of James Stacy Coles, Ph.D., D.Sc., LL.D., ScD., ninth president of the College and the program's chief proponent. The building includes living and study quarters, seminar and conference rooms, lounges, and accommodations for official guests of the College. The first floor is dedicated to the memory and honor of the late Henry Quinby Hawes, A.M., of the Class of 1910, and Mrs. Hawes.

Copeland House, at 88 Federal Street, was acquired in 1972. A residence for students, it was formerly the home of Manton Copeland, Ph.D., who taught biology at the College from 1908 until 1947 and was Josiah Little Professor of Natural Science Emeritus at the time of his death in 1971.

Marshall Perley Cram Alumni House, at 83 Federal Street, was bequeathed to the College in 1933 on the death of Professor Marshall Perley Cram, Ph.D., of the Class of 1904. Renovated in 1962 and maintained by the College, it is the center of alumni activities at Bowdoin and contains lounges, rest rooms, and other facilities for the use of visiting alumni and their families and guests. It also houses the alumni relations office and the offices of the *Bowdoin Alumni Magazine*. The Kate Douglas Wiggin Room, located on the first floor, was presented by the Society of Bowdoin Women in 1986. Displayed on the first floor is a collection of polar bears done in crystal, porcelain, and other media that was the gift of the widow of Daniel L. Dayton, Jr. '49 in 1974.

Curtis Pool Building, a separate wing attached to the Sargent Gymnasium, was given to the College in 1927 by Cyrus H. K. Curtis, LL.D. Designed by McKim, Mead & White, the building now houses the Environmental Studies Center. The pool was closed in October 1987 on the opening of the new pool in the Pickard Field complex.

Dayton Arena, designed by Barr, Gleason, and Barr and named in memory of Daniel L. Dayton, Jr., of the Class of 1949, was built in 1956 with contributions from alumni, students, and friends. It contains seats for 2,400 spectators, a regulation ice-hockey rink with a refrigerated surface 200 feet long by 85 feet wide, locker rooms, and a snack bar. During 1972 and 1973 numerous improvements were made, including the installation of brighter lights and additional ice-making equipment, which enables the arena to be operated year-round. It is the site of intercollegiate and intramural hockey contests as well as recreational skating.

85 Federal Street, the former home of Bowdoin's presidents, was built in 1860 by Captain Francis C. Jordan and originally stood on the lot at 77 Federal Street. It was purchased by the College in 1867 and was occupied by President Harris until 1871. The house was purchased by Peleg W. Chandler, who had it moved in 1874 to its present location at the corner of Federal and Bath streets. In 1890 the College reacquired the house, and shortly after President Hyde assumed office in 1885, it became his official residence. The ballroom, designed by Felix Arnold Burton, was added in 1926. The building now houses development and alumni fund offices.

Getchell House, located at 5 Bath Street, is diagonally opposite Adams Hall. It was given in 1955 by Miss Gertrude Bowdoin Getchell, who had provided lodgings for students in the house, and it was completely refurbished in 1956. It houses the public relations and publications offices.

The Harvey Dow Gibson Hall of Music, named for Harvey Dow Gibson, LL.D., of the Class of 1902, was dedicated in 1954. Its construction was made possible by funds donated by Mrs. Harvey Dow Gibson; by Mrs. Gibson's daughter, Mrs. Whitney Bourne Choate; by the Manufacturers Trust Company of New York; and by several friends of Mr. Gibson. Designed by McKim, Mead & White, the building contains class, rehearsal, and practice rooms, a recording room, several rooms for listening to records, offices, and a music library. A recital hall was completed in 1978. The common room is richly paneled in carved walnut from the music salon designed in 1724 by Jean Lassurance (1695-1755) for the Hôtel de Sens in Paris.

Ham House, at 3 Bath Street, was built in 1846 and has been a residence for generations of Bowdoin professors, most recently for Professor and Mrs. Roscoe J. Ham, who lived in it from 1909 until their deaths in 1953. The house was bequeathed to the College by Professor Ham, George Taylor Files Professor of Modern Languages, who taught at Bowdoin from 1901 to 1945. It now houses Bowdoin Upward Bound.

Harpwell Street Apartments, adjacent to Pickard Field, and **Pine Street Apartments**, across from Whittier Field, were designed by Design Five Maine, Inc., and opened in the fall of 1973. There are two buildings of contemporary design at each location, and each of the buildings contains six apartments. The apartments, which accommodate up to ninety-six students, were built to meet the need for additional housing and to provide an alternative to living in a conventional dormitory.

Nathaniel Hawthorne-Henry Wadsworth Longfellow Library, designed by Steinman, Cain and White of New York, was built in 1964-1965 from funds contributed during the Capital Campaign. It was named after two of Bowdoin's literary giants, both members of the Class of 1825. It houses the principal portions of the library of the College and—in its western end,

named **Hawthorne-Longfellow Hall**—most of the general administrative offices of the College. In 1984, the Hubbard Hall-library connector, designed by Shepley Bulfinch Richardson and Abbott, was completed. The area containing the government documents is named in memory of John C. Donovan, the DeAlva Stanwood Alexander Professor of Government and member of the faculty from 1965 to 1984. Renovations to Hubbard's book stack area, additional open-shelf space, and increased study areas were also finished. Also included in the project was climate control for a remodeled and enlarged Special Collections Suite.

Hubbard Grandstand was given in 1904 by General Thomas H. Hubbard, LL.D., of the Class of 1857, and designed by Henry Vaughan. It is situated on **Whittier Field**, a tract of five acres, named in honor of Frank Nathaniel Whittier, M.D., of the Class of 1885, for many years director of the gymnasium, who was largely instrumental in its acquisition for varsity football and track in 1896. An electrically operated scoreboard, the gift of the widows of Harvey Dow Gibson, LL.D., of the Class of 1902, and Adriel Ulmer Bird, A.M., of the Class of 1916, was erected in 1960. Surrounding the field is the **John Joseph Magee Track**, an Olympic regulation all-weather track given by alumni and friends in memory of Mr. Magee, coach, trainer, and director of track and field athletics from 1913 to 1955.

Hubbard Hall, designed by Henry Vaughan and erected in 1902-1903, was the gift of General Hubbard and his wife, Sibyl Fahnestock Hubbard. For over sixty years, until the fall of 1965, it was the College library. It is now used for faculty offices, examination rooms, and the Departments of Geology, History, Economics, and Government and Legal Studies. Located in the basement is the Computing Center, which contains a DEC 10 and a VAX 11/780 time-sharing system. The Peary-MacMillan Arctic Museum and Arctic Studies Center are located in the building, with museum facilities on the first floor, and the Susan Dwight Bliss Room for rare books and bindings remains on the second floor. During the spring of 1977 the large west wing of the second floor was restored to its original condition and now provides additional study area for students.

Johnson House, designed by Gervase Wheeler and named in memory of Henry Johnson, Ph.D., Litt.D., of the Class of 1874, a distinguished member of the Bowdoin faculty from 1877 to 1918, and Mrs. Johnson, is located at the corner of Maine and Boody streets across from the southwestern entrance to the campus. Bequeathed to the College in 1957, the house was designated a Registered Historical Landmark in 1975. It is now the home of the president of the College.

Little-Mitchell House, at 6-8 College Street, was designed and built by Samuel Melcher III and houses the John Brown Russwurm Afro-American

Center. The Mitchell House is named in honor of Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory from 1893 to 1939. It was given by Professor Mitchell in 1961. The Little House, the 8 College Street side of the connected buildings, was acquired in 1962.

Little-Mitchell House was opened as the Afro-American Center in 1970 and rededicated as the John Brown Russwurm Afro-American Center in 1979 in honor of John Brown Russwurm, of the Class of 1826, Bowdoin's first black graduate, publisher, and governor of the colony of Maryland in Liberia at the time of his death in 1851. The center houses the offices of the Afro-American Studies Program; the Herman S. Dreer Reading Room, named in honor of a black graduate of the Class of 1910; and a 1,560-volume library of African and Afro-American source materials.

Massachusetts Hall, planned in 1798 and completed in 1802 by Aaron and Samuel Melcher III, who designed the building as well, was the first College building erected. In 1936 it was remodeled, and five years later, through a gift of Frank Herbert Swan, LL.D., of the Class of 1898, the third floor was restored and furnished to accommodate faculty meetings. Until 1965 the building housed the offices of some of the administrative officers. Since then, it has been used for faculty offices.

Mayflower Apartments, at 14 Belmont Street, were acquired in 1972. Located within a few minutes' walk of the campus, the complex accommodates forty students.

Memorial Hall, designed by Samuel D. Backus and William G. Preston and finished in 1882, is a structure of local granite in the Gothic style. It is a memorial to the alumni and students of the College who served in the Civil War and whose names and ranks are inscribed on bronze plaques in the lobby. The lower floor contains classrooms and an experimental theater, which is named in memory of George H. Quinby, of the Class of 1923, who was director of dramatics and taught English from 1934 to 1969. The entire interior was redesigned by McKim, Mead & White and rebuilt in 1954-1955 to house the Pickard Theater, one of the gifts of Frederick William Pickard, LL.D., of the Class of 1894. On the lower level is a plaque memorializing William H. Moody, of the Class of 1956, theater technician from 1958 until his death in 1976.

Malcolm E. Morrell Gymnasium, connected to Sargent Gymnasium, is a 50,000-square-foot building designed by Hugh Stubbins and Associates. Built in 1964-1965 from funds contributed during the Capital Campaign, it was in 1969 named in memory of Malcolm Elmer Morrell, of the Class of 1924, Bowdoin's director of athletics from 1928 to 1967. The gymnasium contains a modern basketball court with seats for about 2,500 persons, four

visiting team rooms, eleven squash courts, offices for the director of athletics and his staff, and other rooms for physical education purposes.

The Moulton Union, designed by McKim, Mead & White, was built in 1927-1928. It was given and partially endowed by Augustus Freedom Moulton, LL.D., of the Class of 1873, as a social, recreational, and service center for the College. In 1964-1965, a two-story extension was added on the south and east sides of the building. The spacious main lounge and several smaller, intimate lounges and student activity areas are provided for general social purposes. The Union also contains the college reception and information center; the campus telephone switchboard; a bookstore; dining facilities; and a game room. The Union stands just outside the quadrangle opposite Appleton, Hyde, and Moore halls.

The Observatory was designed by Samuel B. Dunning and erected near the present Curtis Pool in 1890-1891 with funds given by John Taylor, Esq., of Fairbury, Illinois. It was moved to the southeast corner of Pickard Field in the summer of 1930 and is reached from the Harpswell Road. In 1965 it was renovated and a new telescope was installed.

Pickard Field House stands at the entrance of Pickard Field. It was given in 1937 by Frederick William Pickard, LL.D., of the Class of 1894, and Mrs. Pickard. The building, designed by John Calvin Stevens, contains lockers and showers for men and women. The **William Farley Field House** and new sixteen-lane pool, which opened in the fall of 1987, are attached to the rear of the original structure. **Pickard Field**, a tract of sixty-six acres, was presented to the College by Mr. Pickard in 1926. In 1952 nine acres were added to the field by purchase, making a total area of seventy-five acres, thirty-six of which are fully developed playing fields. The field contains the varsity and freshman baseball diamonds, several spacious playing fields for football and soccer, and ten tennis courts.

Pickard Theater in Memorial Hall, also a gift of Mr. Pickard, was designed by McKim, Mead & White and dedicated in 1955. It has a seating capacity of slightly more than 600 and a stage 55 feet wide and 30 feet deep. The space from the stage floor to the gridiron is 48 feet. Adorning the walls of the auditorium are rubbings of six large reliefs of the Chinese emperor T'ai Tsung's war horses. The reliefs were executed about A.D. 637 for the emperor's tomb and were possibly from designs of Yen Li-pen. The rubbings were the gift of Walter H. Mallory in 1955.

Rhodes Hall, formerly the Bath Street Primary School, was purchased from the Town of Brunswick in 1946 to provide additional facilities for instruction and administration. The building was named to commemorate the fact that three pupils of the school later achieved distinction as Rhodes

scholars at Oxford University. Rhodes Hall houses the offices of the Departments of Physical Plant and Campus Security.

Sargent Gymnasium and **General Thomas Worcester Hyde Athletic Building**, designed by Allen and Collens, were erected in 1912. The gymnasium was built from contributions from many of the students and alumni, and named in honor of Dudley A. Sargent, M.D., ScD., of the Class of 1875; the athletic building was given by John Hyde, Esq., of Bath, in memory of his father, Thomas Worcester Hyde, A.M., of the Class of 1861. In 1965-1966 Sargent Gymnasium was altered and renovated to make it part of the comprehensive plan for the indoor athletic facilities of the College.

Mary Frances Searles Science Building, designed by Henry Vaughan, was built in 1894 and renovated in 1952. It was the gift of Edward F. Searles in memory of his wife. With the Walker Art Building, Gibson Hall, and the Visual Arts Center, it forms the western side of the quadrangle. The building contains lecture rooms, laboratories, and libraries of the Departments of Biology and Physics. A battery of solid-state electronic equipment was installed in the Physics Department in 1974. It was purchased with funds provided by the bequest of Constance H. Hall. She was the daughter of Edwin H. Hall of the Class of 1875, best known for his discovery of the Hall Effect, which has become a key principle in the design of solid-state electronic components.

Sills Hall and **Smith Auditorium**, designed by McKim, Mead & White, were completed in the autumn of 1950. The main structure was made possible by the first appropriations from the Sesquicentennial Fund and was named after the eighth president of the College, Kenneth Charles Morton Sills (1879-1954), of the Class of 1901; the wing, containing an auditorium seating 210 persons, was built by appropriation of the Francis, George, David, and Benjamin Smith Fund, bequeathed by Dudley E. Wolfe, of Rockland. The Language Media Center, donated by the Pew Memorial Trust, and the electronic film production laboratory and speech center are located in the wing. In 1968 a donor who wished to remain anonymous established the Constance and Albert Thayer Speech Center Fund to maintain the speech center. The fund was named in honor of the late Albert R. Thayer, A.M., of the Class of 1922, Harrison King McCann Professor of Oral Communication, and his wife.

Winfield Smith House, at 59 Harpswell Street, was acquired in 1972. A residence for students, it is named in memory of L. Winfield Smith, of the Class of 1907, who was born and raised in the house, "in recognition of the Smith family's long and devoted interest in Bowdoin."

10 Cleveland Street is a residence for students.

12 Cleaveland Street houses the offices of the *Bowdoin Orient*.

30 College Street, acquired by the College in 1977, is the headquarters of the International Club and a residence for approximately eight students and teaching fellows.

The Visual Arts Center, designed by Edward Larrabee Barnes and completed in 1975, was constructed with funds given through the 175th Anniversary Campaign. Connected to the Walker Art Building by underground storage and exhibition rooms, the center contains some 23,000 square feet of instructional space. A 300-seat auditorium was dedicated in recognition of a generous grant from the Kresge Foundation. One of the classrooms has been dedicated in honor of Philip C. Beam, Ph.D., Henry Johnson Professor of Art and Archaeology Emeritus and a member of the faculty for more than forty years. The photography area was dedicated to the memory of Alan H. Wiley.

Walker Art Building, designed by McKim, Mead & White, was erected in 1892-1894 and extensively renovated in 1975-1976. It was given by the Misses Harriet and Sophia Walker, of Waltham, Massachusetts, as a memorial to their uncle, Theophilus Wheeler Walker, of Boston, a cousin of President Woods. A bronze bulletin board in memory of Henry Edwin Andrews, A.M., of the Class of 1894, director of the museum from 1920 to 1939, is located in the rotunda. The building is surrounded on three sides by a paved terrace with supporting walls and parapets of granite. Granite and bronze sculptures adorn the front wall. Following the renovation of the building, one of the galleries on the lower level was dedicated to the memory of John A. and Helen P. Becker. The central gallery on the lower level was dedicated to the memory of John H. Halford, Class of 1907, Overseer and Trustee of the College for twenty years.

Wentworth Hall was named in memory of Walter V. Wentworth, Sc.D., of the Class of 1886, an Overseer of the College from 1929 to 1958. Constructed in 1964 and designed by Hugh Stubbins, it is a two-story building adjacent to Coles Tower and contains a dining room, main lounge, and other rooms for instructional, social, and cultural activities. In 1974 the main lounge was dedicated to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925, acting president from 1967 to 1969 and for many years William Nelson Cromwell Professor of Constitutional and International Law and Government.

Women's Resource Center, at 24 College Street, houses a library and the office of the Bowdoin Women's Association, and provides student housing.

OTHER MEMORIALS

Albert Abrahamson '26 Reading Room, on the top floor of the newly renovated stack area of Hubbard Hall, is dedicated to the George Lincoln Skolfield, Jr., Professor of Economics Emeritus, member of the faculty for twenty-five years and generous benefactor of the library renovation project.

The Harold Lee Berry Special Collections Suite, in Hawthorne-Longfellow Library, is named in memory of Harold Lee Berry, A.M., of the Class of 1901, for nearly forty years a member of the Governing Boards, and generous benefactor of the College. The suite comprises several rooms in the northeast area of the third floor.

The Bowdoin Polar Bear, placed in 1937, is a memorial to members of the Class of 1912. The base and life-size statue were carved by Frederick George Richard Roth. The figure stands in front of the entrance to the Sargent Gymnasium.

The Stuart Franklin Brown Lobby, in Hawthorne-Longfellow Library, is a memorial to Stuart Franklin Brown, of the Class of 1910, and was the gift of Mrs. Brown.

The Calder Mobile was purchased with funds given in the memory of Charles B. Price III, of the Class of 1974, who died in 1972. Purchased because Price was an admirer of the work of Alexander Calder, the mobile hangs in the Hawthorne-Longfellow Library. Price, a biology and economics major, was a Dean's List student and James Bowdoin Scholar.

Catlin Path, extending from the Warren Eastman Robinson Gateway to Hubbard Hall, was laid in 1954 through the generous gift of Warren Benjamin Catlin, Ph.D., for many years Fayerweather Professor of Economics and Sociology.

The Chase Memorial Lamps, dedicated to the memory of Stanley Perkins Chase, Ph.D., of the Class of 1905, Henry Leland Chapman Professor of English Literature (1925-1951), stand on the Moulton Union terrace. They were presented to the College by Mrs. Chase in 1954.

The Class of 1875 Gateway was designed by McKim, Mead & White and erected in 1901 as a memorial to members of the class. It forms the Maine Street entrance of the Class of 1895 Path.

The Class of 1878 Gateway, designed by Kilham and Hopkins and erected in 1903, is a memorial to members of the class. It is on Bath Street between Memorial Hall and the First Parish Church.

The Class of 1886 Pathways are a network of walks laid in 1945 as a memorial to members of his class through the generosity of Walter V. Went-

worth, Sc.D., of the Class of 1886. The pathways traverse an area lying north of Massachusetts Hall.

The Class of 1895 Path was laid in 1945 as a memorial to members of the class. It extends from the Chapel to the Class of 1875 Gateway.

The Class of 1898 Bulletin Board, erected in 1924, is a memorial to members of the class. It is made of bronze, is double-faced and illuminated.

The Class of 1903 Gateway, erected in 1928, is a memorial to members of the class. It forms the main entrance to the Whittier Athletic Field.

The Class of 1909 Organ, an electronic instrument for use in the Pickard Theater, was presented by the Class of 1909 on the occasion of its fiftieth anniversary and dedicated in June 1960. A fund given at the same time is for the maintenance of the organ and for the support of musical education in the College.

The Class of 1910 Path was laid in 1940 as a memorial to members of the class. It extends from Bath Street to Coleman Hall, running parallel to the four dormitories and in front of the entrance to the Chapel.

The Class of 1914 Librarian's Office, in the Hawthorne-Longfellow Library, is in honor of the members of the Class of 1914, who made a specific gift for this purpose.

The Class of 1916 Path was laid in 1946 as a memorial to members of the class. It extends from Massachusetts Hall to the Alpheus Spring Packard Gateway.

The Class of 1919 Path, laid in 1945, is a memorial to members of the class. It extends from the north entrance of Winthrop Hall, past the entrances to Massachusetts Hall and Memorial Hall, to the Franklin Clement Robinson Gateway.

The Class of 1922 Fountain, between Hawthorne-Longfellow Library and Hubbard Hall, was constructed in 1968. It is the gift of Mrs. John C. Pickard of Wilmington, Delaware, in honor of her husband's class. The fountain was designed by André R. Warren and was constructed by workmen of the Department of Physical Plant.

The Class of 1924 Radio Station (WBOR, "Bowdoin-on-Radio") was given by the Class of 1924 on the occasion of its twenty-fifth reunion. The station, installed in 1951 on the second floor of the Moulton Union, contains two broadcasting studios and a fully equipped control room.

The Class of 1929 Electronic Chimes System, for automation of the Chapel chimes, was presented by the Class of 1929 on the occasion of its

fortieth reunion. A fund for maintenance of the system was established at the same time.

The Class of 1937 Lounge, in the Cram Alumni House, was presented by the Class of 1937 on the occasion of its twenty-fifth reunion. It is a large, informal, and rustic room, with pine furniture, old pictures of Bowdoin and of Brunswick, and a large hewn granite fireplace. The lounge was given in memory of Harold L. Cross, Jr., David T. Deane, J. Donald Dyer, and Maxwell A. Eaton, who gave their lives in the service of their country during World War II.

The Class of 1938 Newspaper Room, in the Hawthorne-Longfellow Library, is in honor of the members of the class. The room is on the first floor to the right of the entrance.

The Class of 1942 Cross was placed behind the reading stand in the Chapel in 1952 in memory of class members who gave their lives during World War II.

The Harry Howard Cloudman Drinking Fountain, erected in 1938, is in memory of Harry Howard Cloudman, M.D., of the Class of 1901, one of the outstanding athletes at the turn of the century. It stands near the Sargent Gymnasium.

The Robert Peter Tristram Coffin Reading Room, in the Hawthorne-Longfellow Library, is in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, a distinguished author, poet, and professor. The room was the gift of the Class of 1915 on the occasion of its fiftieth reunion and occupies the northern bay on the first floor.

The Colbath Room, in the Morrell Gymnasium, is a memorial to Henry Jewett Colbath, of the Class of 1910, an outstanding athlete, dedicated teacher, and coach.

The William John Curtis 1875 Room, in the Hawthorne-Longfellow Library, is a memorial to William John Curtis, LL.D., of the Class of 1875, for over twenty-five years an Overseer and Trustee of the College, and a generous benefactor always in the name of his class. The room, in the northeast corner of the first floor, is used for current periodicals.

Daggett Lounge, the main lounge in Wentworth Hall, was dedicated in 1974 to the memory of Athern P. Daggett, Ph.D., LL.D., of the Class of 1925. Professor Daggett, a member of the faculty for more than forty years and acting president from 1967 to 1969, was William Nelson Cromwell Professor of Constitutional and International Law and Government at the time of his death in 1973.

The Dane Flagpole, in honor of Francis Smith Dane, of the Class of 1896, stands in the northwest corner of Whittier Field. The gift of Mrs. Annie Lawrence E. Dane and a member of her family, the flagpole was placed in 1954 in recognition of Mr. Dane's efforts as an undergraduate to acquire an adequate playing field for the College.

The James Frederick Dudley Classroom in Banister Hall was renovated and furnished in 1954 as a memorial to James F. Dudley, A.M., of the Class of 1865, by the bequest of Nettie S. Dudley.

The William Pitt Fessenden Conference Room, in Hawthorne-Longfellow Hall, is a memorial to William Pitt Fessenden, LL.D., of the Class of 1823, United States senator 1854-1864, 1865-1869; United States secretary of the treasury 1864-1865; and Overseer and Trustee of the College from 1843 to 1869. The room is on the second floor, near the offices of the president and deans.

The Melville Weston Fuller Reading Room, in Hawthorne-Longfellow Library, is a memorial to Melville Weston Fuller, LL.D., of the Class of 1853, chief justice of the United States Supreme Court from 1888 to 1910, and an Overseer and Trustee of the College from 1875 to 1910. The room occupies the southern bay on the first floor.

The Gardner Bench, near Hawthorne-Longfellow Library, is dedicated to the memory of William Alexander Gardner, of the Class of 1881, and was presented to the College by Mrs. Gardner in 1954.

The Greene Suite, an apartment on the sixteenth floor of Coles Tower, is a memorial to the Reverend Joseph K. Greene, of the Class of 1855, and to Professor Theodore M. Greene, L.H.D., and his wife, Elizabeth R. Greene. The Reverend Mr. Greene, father of Professor Greene, was a missionary to Turkey. Professor and Mrs. Greene lived in the suite from 1966 to 1969 while he was visiting professor of philosophy.

The Lawrence Sargent Hall Room, on the second floor of Massachusetts Hall, was named in 1986 to honor Professor Hall, of the Class of 1936, Henry Leland Chapman Professor of English Literature. The room was Professor Hall's office for many years and will continue to be the office of the Henry Leland Chapman Professor of English Literature.

Hutchinson Lounge and Hutchinson Terrace, in Wentworth Hall, are memorials to Charles Lyman Hutchinson, of the Class of 1890, a prominent lawyer in Portland. They are on the south side of the building between the main dining room and lounge.

The Elijah Kellogg Tree, a large pine dedicated to the memory of the Reverend Elijah Kellogg, A.M., of the Class of 1840, stands near the corner of Bath Street and Sills Drive.

The Fritz C. A. Koelln Room, in Sills Hall, was dedicated in 1971 in honor of Fritz C. A. Koelln, Ph.D., George Taylor Files Professor of Modern Languages Emeritus and a member of the Department of German from 1929 until his retirement in 1971, "in recognition of his devoted service to the College and the inspiration he has been to so many undergraduates over the years."

The Donovan D. Lancaster Lounge, in the Moulton Union, was named in November 1970 in honor of Donovan D. Lancaster, of the Class of 1927, Director of the Moulton Union and the Centralized Dining Service Emeritus and a member of the College staff for over forty years. The lounge is used for lectures and exhibitions of art and photography throughout the year.

The George Thomas Little Bibliography and Card Catalogue Area, in Hawthorne-Longfellow Library, is a memorial to George Thomas Little, Litt.D., of the Class of 1877, librarian of the College from 1885 to 1915. The area occupies the center portion of the first floor.

Little Ponds Wildlife Sanctuary is the gift of Mrs. Harold Trowbridge Pulsifer, in memory of her husband, and Sheldon Ware, a neighbor. Located at Bethel Point, East Harpswell, and the result of a series of gifts beginning in 1961, this tract of fifteen acres includes a meadow, pond, woodland, and shore frontage. It is used for the study and conservation of wildlife and is the site of the Bowdoin College Marine Research Station.

The Harrison King McCann Music Lounge, on the sixteenth floor of the Coles Tower, is a memorial to Harrison King McCann, A.M., of the Class of 1902, for thirty years an Overseer of the College.

The Cecil Cleophus McLaughlin Study, in Chamberlain Hall, is a memorial to Cecil Cleophus McLaughlin, M.D., of the Class of 1923. The study was the gift of his wife.

The John Joseph Magee Track, surrounding Whittier Field, was given by a group of alumni and friends to honor the memory of John Joseph Magee, coach, trainer, and director of track and field athletics from 1913 to 1955 and an Olympic team coach in 1920, 1924, 1928, and 1932. Constructed in 1970, the Olympic regulation all-weather track was dedicated in 1971.

The Magee Training Room, in the Morrell Gymnasium, is another memorial to Coach Magee.

The Memorial Flagpole, designed by McKim, Mead & White, was erected in 1930 with funds given by the alumni in memory of the twenty-nine Bowdoin men who lost their lives in World War I. The Honor Roll is engraved on the mammoth granite base surmounted by ornamental bronze.

The flagpole stands in the southwestern corner of the campus between Hubbard Hall, Walker Art Building, and Gibson Hall.

The Wilmot Brookings Mitchell Lounge, on the second floor of Wentworth Hall, is a memorial to Wilmot Brookings Mitchell, Litt.D., L.H.D., of the Class of 1890, a beloved teacher of English for almost fifty years.

The Morrell Office, in the Malcolm E. Morrell Gymnasium, was given by members of the Class of 1924 in honor of their classmate Malcolm Elmer Morrell, director of athletics from 1928 to 1967. It is the office of the director of athletics.

The Dean Paul Nixon Lounge-Conference Room, in Hawthorne-Longfellow Library, is a memorial to Paul Nixon, L.H.D., LL.D., for over forty years a teacher of Latin and Dean of the College from 1918 to 1947. The room is on the southeast corner of the third floor.

The Alpheus Spring Packard Gateway, designed by Felix Arnold Burton and erected in 1940 on College Street, is a memorial to Alpheus Spring Packard, D.D., of the Class of 1816, a member of the Bowdoin faculty from 1819 to 1884.

The Peucinian Room, built in 1951, is in a corner of the lower floor of Sills Hall. It is paneled in timber taken from the Bowdoin Pines. The motto of the Peucinian Society, *Pinos loquentes semper habemus*, is carved on a heavy timber above the fireplace. The fireplace and paneling were the gift of the Bowdoin Fathers Association in memory of Suzanne Young (1922-1948).

The Pickard Trees, twelve hawthorns in memory of Jane Coleman Pickard (Mrs. Frederick William Pickard), donor of Coleman Hall and co-donor of the Pickard Field House, were replanted around Coleman Hall by the Society of Bowdoin Women and dedicated in June 1959.

The Franklin Pierce Reading Room, in Hawthorne-Longfellow Library, is in memory of Franklin Pierce, LL.D., of the Class of 1824, the fourteenth president of the United States. This informal reading room is at the east end of the second floor.

The William Curtis Pierce Library, on the second floor of the Visual Arts Center, was dedicated in honor of William Curtis Pierce, LL.B., LL.D., of the Class of 1928, in recognition of service to the College as an Overseer, Trustee, and supporter of the arts.

The Presidents' Gateway, erected in 1932, is a gift of the Class of 1907 in memory of William DeWitt Hyde, D.D., LL.D., president of the College from 1885 to 1917, and "as a mark of the enduring regard of all Bowdoin

men for the leadership of their Presidents." The gateway forms one of the northern entrances to the campus from Bath Street.

The Franklin Clement Robinson Gateway, designed by Felix Arnold Burton and erected in 1923, is a memorial to Franklin Clement Robinson, LL.D., of the Class of 1873, for thirty-six years a teacher at Bowdoin College, and to his wife, Ella Maria Tucker Robinson. The gateway forms the northwestern entrance to the campus.

The Warren Eastman Robinson Gateway, designed by Felix Arnold Burton and erected in 1920 at the southwestern entrance to the campus, is a memorial to Lieutenant Warren Eastman Robinson, of the Class of 1910, who lost his life in the service of his country.

The Chapman Lobby, in the Farley Field House, the gift of H. Phillip Chapman, Jr. is dedicated in honor of his father Henry P. Chapman of the Class of 1906.

The Class of 1977 Lounge, in the Farley Field House, tenth reunion gift, is dedicated to the memory of idyllic days beneath the Bowdoin Pines.

The Shumway Tree, a Rocky Mountain fir in memory of Sherman Nelson Shumway, A.M., LL.B., of the Class of 1917, generous benefactor and an Overseer of the College (1927-1954), was replanted on the campus and dedicated in June 1955. It stands in front of Hawthorne-Longfellow Hall.

The Simpson Memorial Sound System, the gift of Scott Clement Ward Simpson, of the Class of 1903, and Mrs. Simpson, is dedicated to the memory of their parents. The system was installed in Gibson Hall in 1954. A fund for its maintenance was established by Mr. and Mrs. Simpson in 1955.

The Turner Tree, a maple in memory of Perley Smith Turner, A.M., of the Class of 1919, professor of education at Bowdoin (1946-1956), was replanted on the campus east of Smith Auditorium by classmates and friends and dedicated in June 1957.

The Lou Tripaldi Training Room, in the Farley Field House, is a gift to the College by members of the Class of 1973 in memory of their classmate.

The Class of 1961 Trophy Case, in the Farley Field House, is a gift in honor of Charles E. Prinn III, Class Agent.

The Gerald Gardner Wilder Cataloguing Room, in Hawthorne-Longfellow Library, is a memorial to Gerald Gardner Wilder, A.M., of the Class of 1904, librarian of the College from 1916 to 1944. The room is in the southeast area on the first floor.

The Philip S. Wilder Room, on the third floor of Hawthorne-Longfellow Hall, is named in honor of Philip S. Wilder, of the Class of 1923, in recognition of more than fifty years of devoted service to the College.

The Frank Edward Woodruff Room, in Sills Hall, is a memorial to Frank Edward Woodruff, A.M., a member of the Bowdoin faculty from 1887 to 1922. The room was provided in 1951 through the generous bequest of Edith Salome Woodruff.

General Information

TERMS AND VACATIONS: The College holds two sessions each year, beginning in September and January. The dates of the semesters and the vacation periods are indicated in the College Calendar on pages v-viii.

Bowdoin is an independent, nonsectarian, coeducational, residential, undergraduate, liberal arts college located in Brunswick, Maine, a town of 19,000 situated close to the Maine coast, 25 miles from Portland and about 120 miles from Boston.

Accreditation: Bowdoin College is accredited by the New England Association of Schools and Colleges.

Enrollment: The student body numbers 1,350 students (55% male, 45% female; last two classes 51/49%); about 140 students study away one or both semesters annually; 90% complete degree within five years.

Faculty/Student Ratio: 1:12; the faculty numbers 114, 95% with Ph.D. or equivalent, and 17 coaches.

Geographic Distribution in Entering Class: New England 51%; Middle Atlantic states 21%; Midwest 11%; West 9%; South 6%; foreign 2%. Forty-five states and 18 countries represented. Minority and international enrollment 7%.

Statistics: As of June 1988, 26,764 students have matriculated at Bowdoin College, and 20,222 degrees in courses have been awarded. In addition, earned master's degrees have been awarded to 274 postgraduate students. Living alumni include 11,512 graduates, 2,026 nongraduates, 145 honorary graduates, and 263 graduates in the specific postgraduate program.

Offices and Office Hours: The Admissions Office is located in Chamberlain Hall. General administration and business offices are located in Hawthorne-Longfellow Hall, the west end of the Nathaniel Hawthorne-Henry Wadsworth Longfellow Library. The Development and Alumni Relations offices are located at 83 and 85 Federal Street. The Office of Career Services is in the Moulton Union. The office of the college counselor is in the Dudley Coe Health Center. The Department of Physical Plant is in Rhodes Hall.

In general, the administrative offices of the College are open from 8:30 A.M. to 5:00 P.M., Monday through Friday. Summer hours are from 8:30 A.M. to 4:00 P.M.

Telephone Switchboard: The College has a central telephone switchboard located in the Moulton Union. All college phones are connected to this switchboard. The number is 207-725-3000.

COLLEGE CHARGES AND BILLING INFORMATION

College Charges 1988-89: The charges for tuition, room rent, board, and fees** for the College year 1988-89 are as follows:

	By Semester		Total For the Year
	Fall	Spring	
Tuition	\$6,217.50	\$6,217.50	\$12,435.00
Board	1,230.00	1,230.00	2,460.00
Room Rent:			
Dormitories	962.50	962.50	1,925.00
Pine and Harpswell			
Street Apartments	1,325.00*	1,325.00*	2,650.00*
Other Apartments	1,100.00*	1,100.00*	2,200.00*
Student Activities Fee	65.00	65.00	130.00
Health Insurance	70.00	70.00	140.00***

*When normal occupancy is varied, rates may change accordingly.

**The College charges do not include costs for travel, books, or personal expenses; the student must budget for such items on his/her own.

***These fees reflect current charges and may change for 1988-89.

For planning purposes, students and parents should anticipate that tuition and other charges may increase each year to reflect program changes and other cost increases experienced by the College.

College Bills: Statements and bills covering College charges will be sent to the student unless the Cashier has been requested *in writing* to direct them to someone other than the student. Semester statements will be sent to *every* student regardless of the payment option selected. Information about payment options is on pages 63-66.

Registration and Enrollment: All students are required to register at the opening of each semester in accordance with schedules posted at the College and mailed to students registering for the first time. A fee of \$20 is assessed for late registration.

Refunds: Refunds of tuition and fees for students leaving college during the course of a semester will be made in accordance with the following refund schedule:

During the first two weeks.....	80%
During the third week.....	60%
During the fourth week.....	40%
During the fifth week.....	20%
Over five weeks.....	No refund

Refunds for board and room will be prorated on a daily basis in accordance with the student's attendance as it relates to the College's calendar, after adjustments for fixed commitments and applicable overhead expense. *Students who are dismissed from the College within the first five weeks for other than academic or medical reasons are not entitled to refunds.* Financial aid awards will be credited in proportion to educational expenses as stipulated in a student's award letter, but in no case will they exceed total charges to be collected. Application for a refund must be made in writing to the Cashier of the College within 30 days of the student's leaving.

Tuition: The tuition fee for the 1988-89 academic year is \$6,217.50 each semester or \$12,435 for the year. There is a per-course charge of \$1,555 for students who have permission to take fewer than three courses a semester. Students who wish to register for fewer than three courses in their final semester must request permission to do so before July 1; if a later request is approved, a \$225 surcharge will be added to the student's tuition bill in the appropriate semester. Any student completing the number of courses required for the degree in fewer than eight semesters must pay tuition for eight semesters, although the dean of the College is authorized to waive the requirements in such cases where the factors of advanced placement, junior year abroad, exchange or transfer status, or similar special circumstances exist. Work taken at other institutions to make up deficiencies in scholarship at Bowdoin or the accumulation of extra credits earned by taking more than four courses during a semester shall not relieve the student of the obligation to pay tuition for eight full semesters at Bowdoin College.

There are opportunities at Bowdoin to receive financial aid in meeting the charge for tuition. Detailed information about scholarships, loans, and other financial aid may be found on pages 74-79.

Room and Board: Entering freshmen are guaranteed housing. They may indicate their residence needs on a preference card issued by the Freshman Advisor during the summer preceding their arrival at Bowdoin. The Assistant Dean of Students coordinates housing accommodations for the remaining classes. Sophomores, juniors, and seniors apply for residential housing in the spring semester yearly through a lottery system, the most equitable approach given the College's limited space for housing. Participants in the lottery establish eligibility with a deposit of \$100, which is subsequently applied toward their room fees. Students who participate in the housing lottery, but then withdraw from College housing will forfeit their deposit.

Residence hall suites consist of a study and bedroom, provided with essential furniture. Students should furnish blankets and pillows; the College furnishes bed linen and towels. College property is not to be removed from the building or from the room in which it belongs; occupants are held responsible for any damage to their rooms or furnishings.

The College owns a variety of apartments located near the campus. Rent for these apartments has been set at \$2,650 a student for Harpswell and Pine Street apartments and \$2,200 a student for all others for 1988-89. Rent for residence hall rooms and rooms in a fraternity house is \$1,925.

Board is \$2,460 for the year. These charges are the same regardless of whether a student eats at the Moulton Union, Coles Tower, or a fraternity. Students who live in Bowdoin facilities, except apartments, are required to take a full board plan. Partial board packages are available to students living off-campus or in College-owned apartments.

Other College Charges: All damage to the buildings or other property of the College by persons unknown may be assessed equally on all undergraduates. In each academic year the College collects a student activity fee of \$130. The cost of tuition, board, room, and fees amounts to about \$8,475.00 for the semester. To these items must be added the cost of textbooks, personal expenses (including travel), and fraternity expenses if applicable.

Health Care: The facilities of the Dudley Coe Health Center and the services of the college physician are available to all students.

To cover costs of treatment and care during the college year, in the health center or elsewhere, each student is required to have adequate health and accident insurance. This must be purchased through the College (the present group rate of \$70 per semester is subject to change), unless a parent or guardian certifies that a student is covered otherwise by adequate health insurance. Students who purchase insurance through the College for either the fall or spring semester or both continue to be covered through the summer without additional charge.

Bills are rendered by the College for many medical services provided by the health center. Most of these costs are covered by the student health insurance available through the College. A pamphlet specifying the coverage provided by student health insurance is available from the Cashier. If the parents or guardians choose not to purchase Bowdoin student health insurance, bills for services provided at the health center will be sent to the specified insurance carrier. Any costs not covered by insurance will be charged to the student's account.

Motor Vehicles: All motor vehicles, including motorcycles and motor scooters, used on campus or owned and/or operated by residents of any College-owned residence or recognized fraternity must be registered with Campus Security. The registration fee is \$10 a year. Failure to register a motor vehicle may result in a fine of \$25. Students wishing to register a vehicle for a period of time less than one semester must make special arrangements with Campus Security. All students maintaining motor vehicles at the College are required to carry adequate liability insurance. Parking on Cam-

pus Drive is limited and students will be assigned parking areas according to their living locations.

PAYMENT OPTIONS

Students and their parents or guardians may pay the college charges as they fall due each semester or in accordance with Bowdoin's ten-month installment plan. They may also arrange to pay the total due by using a mixture of these two payment arrangements.

The payment dates in the Bowdoin-sponsored payment plans cannot be deferred for the convenience of families using guaranteed student and parent loans, or other tuition payment programs. Both long and short term financial arrangements should be made far enough in advance to assure payment on the required dates. Special problems or emergency situations can be discussed with the Cashier at any time.

Students with unpaid bills may not register for or attend classes, nor are they eligible for academic credit, semester grade reports, transcripts, or degrees.

Option I

Payment by Semester: About July 15 a bill will be sent for the tuition, board, room rent, and fees for the fall semester. Credits (funds actually received) and *tentative credits* (funds not yet received but expected to arrive) will also appear on the bill. Bowdoin scholarship grants, payments from the family, or any other cash payments are examples of credits. Non-Bowdoin scholarship aid that has been reported, payments arranged for under the Bowdoin Installment Payment Plan, etc., are examples of tentative credits. The balance due is the difference between all charges and all of the credits and tentative credits. The bill for the spring semester will be sent about December 15.

Late Payment Charge: The balance due each semester will be considered overdue if not paid within 15 days of the billing date, and any unpaid balance will be subject to a late charge of 10% per annum.

Option II

The Bowdoin Installment Payment Plan (IPP): The Bowdoin Installment Payment Plan spreads the charges for a full year over ten months, beginning July 1. This program is administered on behalf of the College by The Knight Insurance Agency, Inc., of 855 Boylston Street, Boston, Massachusetts 02116.

Eligibility: Any parent or guardian of a Bowdoin undergraduate is eligible for this plan.

Application Deadline: Eligible participants are urged to apply by June 15. Applications made after the start of the program (July 1) must be accompanied by an initial payment sufficient to become current with the regular payment schedule. Applications for the ten-month plan will not be accepted after August 15.

Amount to be Financed: The amount to be financed under IPP may not exceed the total net annual charges (total annual charges less scholarship and loans). If the amount to be financed is less than the net annual charges, the difference will appear as a balance due on the Bowdoin semester bill subject to the provisions of Option I. The minimum amount that can be financed is \$1,000.

Finance Charge: A *Finance Charge* will be applied at an *Annual Percentage Rate of 10%* beginning on *August 1*.

Schedule of Payments: The first of ten monthly payments will be due on July 1, and subsequent payments will be due on the first day of each month thereafter until the entire unpaid interest and principal under IPP are paid.

Optional Payments: Additional optional payments over the basic schedule may be made at any time without penalty. The unearned finance charge will be rebated based on the actuarial method.

Application Fee: A \$45.00 non-refundable application fee must be submitted when returning the IPP application.

Consumer Credit Sales Agreement: The parent and/or guardian must sign a Consumer Credit Sales Agreement providing for the payment of scheduled installments.

Payment Coupons: Parents or guardian will receive a book of dated coupons to identify each payment. Each monthly payment with coupon should be sent to The Knight Insurance Agency, Inc. (855 Boylston Street, Boston, Massachusetts 02116), which will handle the processing and accounting of the IPP for Bowdoin.

Interest Statements: Statements will be sent by the Knight Agency in January for the finance charges (interest) reportable on tax returns.

Delinquent Payments: In addition to the finance charge imposed under the IPP, a late charge of 5% of the monthly payment, or \$5.00, whichever is less, will be charged on any monthly payment in default for a period of 10 days or more.

Acceleration: If any payment is overdue by 30 days or more, Bowdoin shall have the right to declare the entire unpaid balance in the IPP account immediately due and payable. The acceptance of partial payments shall not

be considered a waiver of any such default. Upon payment in full, the unearned finance charge, if any, will be rebated based on the actuarial method.

Insurance: Insurance coverage for IPP is optional and is offered independently of Bowdoin College by The Knight Insurance Agency, Inc.

Option III

The Bowdoin College Student Loan Corporation has created an Extended Payment Plan (EPP) to help middle and upper-middle income families meet the substantial educational expenses for tuition, fees, room, and board. This option is open only to families of students in the Classes of 1989, 1990, and 1991. The plan allows families to structure payments for education over as little as one year or for as long as fourteen years, at a fixed, special rate of interest. Parents can select the amount they wish to borrow each year, and payments can be accelerated at any time, so parents can accommodate both the monthly amount and the length of their repayment schedule to their income, their assets, or other family circumstances. The EPP was designed specifically to provide for interest payments only on the amount borrowed while a student is attending Bowdoin. Equal installments of principal and interest do not begin until after the student leaves the College.

Eligibility: Loans are available to credit-worthy parents or guardians of Bowdoin degree candidates, as well as to Bowdoin students in certain circumstances, if combined annual incomes are less than \$125,000. The College will consider exceptions to this limit for families with more than one child in college at the same time or when there are unusual financial circumstances. Except for approved domestic or international exchange programs, students attending other institutions or taking leaves of absence are not eligible for parent loan support. Bowdoin will review the financial and credit information provided on the application prior to making the loan.

Amount of Loan: Those eligible may borrow an amount between \$2,000 and \$15,000 a year. The loan cannot, however, exceed the total of regular college charges minus any financial aid, including any Guaranteed Student Loan, received by the student.

Disbursement: Ordinarily, one-half of the annual loan will be credited to the student's account on August 1 and January 1. When late applications for parent loans are approved after these dates, any late charges due and payable to Bowdoin College may still be required.

Repayment: The provisions of the program provide for monthly payments of *interest only* on the loans for a period of up to four years while the student is in college and level monthly payments of principal and interest thereafter over a period of ten years. Interest charged under the program is

11 $\frac{7}{8}$ % per annum. Prepayment of loans in part or in full is permissible without penalty except for any interest charges past due. The entire principal and interest may become immediately due and payable at the option of the Bowdoin College Student Loan Corporation if (1) prior to graduation, the student ceases to be enrolled at Bowdoin College or ceases to be enrolled in an academic curriculum approved by the College, or (2) any regular installment shall remain unpaid for more than sixty (60) days after its due date.

Agreement: A single Extended Payment Plan Disclosure Statement and Promissory Note will be executed for the total amount to be borrowed each year.

Insurance Protection: Optional insurance coverage for the loan is offered independently by The Knight Insurance Agency, Inc. This insurance provides protection in the event of the borrower's death or total disability. The life insurance may cover all current and future payments contracted for under the terms of the promissory note. In the event of a total disability, the insurance covers all monthly loan payments for as long as the borrower remains disabled.

Applications: Applications for loans are ordinarily due July 1 for fall disbursement or December 1 for spring disbursement. To receive a Bowdoin Extended Payment Plan application, please contact the Director of Student Aid, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-3273.

Admission to the College

IN January 1976 the Governing Boards of Bowdoin College approved the following statement on admissions:

Our need to be selective has inevitably required that attention be given to the principles of selection. We approve the current admission policy which seeks students who share the common characteristic of being seriously committed to the pursuit of a liberal arts education, but who, beyond that, have different interests, backgrounds, and skills. The common denominator of intellectual commitment presupposes a candidate capable of not merely handling the academic program but of profiting from it and contributing to it. Beyond that common denominator, a candidate ought ideally to possess some particular skill or interest or to represent a culture, region, or background that will contribute to the diversity of the college.

One can analyze the profile of Bowdoin's most recent class and make a rough prediction of a particular student's chances for admission to the next class. In recent years, Bowdoin has admitted approximately one of five candidates. Sixty percent of those admitted will have graduated from a public school, and 80 percent of this group will have ranked in the top 10 percent of their graduating class. Well over half of the independent school graduates will have been in the upper third of their class. Although Bowdoin does not require that a student seeking admission take a prescribed number of courses, the typical entering freshman will have had four years each of English, foreign language, mathematics, and social science; and three and a half years of laboratory sciences.

Candidates applying to Bowdoin College are evaluated individually by members of the admissions staff in terms of four general factors:

Academic Record: Bowdoin is particularly interested in the superior student who seeks out and has excelled in a demanding college preparatory curriculum. Particular emphasis is placed on academic performance in the junior and senior years of secondary school.

References: As standardized test scores are an optional admissions requirement, the recommendations of the candidate's college adviser and a current English teacher, as well as a second faculty recommendation of the student's choice, are important. Perceptions of the candidate's motivation, creativity, determination, and aptitude help the admissions staff sort out the very best from the very good.

Talent: Because of its small size and the variety of its academic and

extracurricular offerings, the College is looking for a depth of talent and accomplishments in a few areas rather than surface involvement in many areas.

Class Composition: Rather than measure each individual candidate against fixed admissions standards, the College seeks a class full of differences: students with different talents, of differing backgrounds, from different places, with different points of view. Intellectual commitment must be demonstrated by all admitted candidates, however.

APPLICATION AND ADMISSION PROCEDURES

Early Decision: Each year Bowdoin offers admission to approximately one-third of its entering class through its Early Decision program. Those candidates who are certain that Bowdoin is their first choice should seriously consider this option since it may resolve the problem of college admission early in the senior year. Bowdoin is in agreement with other colleges regarding the general ground rules, which are as follows:

1. When candidates file a formal application for admission, they must state in writing that they wish to be considered for Early Decision and that they will enroll if admitted. Early Decision candidates may file regular applications at other colleges, but only with the understanding that these will be withdrawn and no new applications will be initiated if they are accepted on an Early Decision basis by their first-choice college. In other words, only one Early Decision application can be made, but other regular applications may be initiated simultaneously.

2. The completed Personal Application form and formal request for Early Decision, a School Report form, a secondary school transcript of grades, an English Teacher Comments form, and an additional teacher comments form must be submitted to Bowdoin by November 15. Decisions on Early Decision applicants, whose applications are complete by November 15, will be announced by late December.

3. Candidates admitted via Early Decision who have financial need as established by the guidelines of the College Scholarship Service and based on the Financial Aid Form will be notified of the amount of their award at the time they receive their Early Decision acceptance, provided their financial aid forms are on file at Bowdoin. It is Bowdoin's policy to fund all needy students who are admitted via Early Decision.

4. The submission of College Entrance Examination Board or American College Testing scores at Bowdoin is optional as an admissions requirement. Applicants need not be deterred from applying for Early Decision because they have not completed the CEEB or ACT tests.

5. An Early Decision acceptance is contingent upon completion of the senior year in good standing.

6. Most candidates not accepted under the Early Decision program will

automatically be transferred to the regular applicant pool. Each year a number of applicants who are deferred under Early Decision are accepted in mid-April, when decisions on all regular admissions are announced. A number of students, however, are denied admission at Early Decision time.

7. Responsibility for understanding and complying with the ground rules of Early Decision rests with the candidate. Should an Early Decision candidate violate the provisions of the program, the College will reconsider its offer of admission (and financial aid if appropriate) to the candidate.

Regular Admission: The following items constitute a completed admissions folder:

1. The student's application form submitted with the application fee (\$35) as early as possible in the senior year. The deadline for receiving regular applications is *January 15*.

2. School Report: The college adviser's estimate of the candidate's character and accomplishments and a copy of the secondary school record should be returned to Bowdoin no later than January 15. A transcript of grades through the mid-year marking period (Mid-Year School Report) should be returned to Bowdoin by February 15. If a student matriculates at Bowdoin College, the School Report and secondary school transcript *will* become part of the permanent college file and will be available for the student's inspection.

3. Recommendations: Each candidate is required to submit the English Teacher Comments form, which should be given to the English teacher for completion and returned as soon as possible and no later than January 15. An additional teacher comments form may be submitted if a student feels that another opinion is necessary. If students have any outstanding strength, particularly academic, that they feel should be documented in their Bowdoin application, they should have their teacher, coach, or club adviser write to Bowdoin directly. If a student matriculates at Bowdoin College, required references *will* become part of the permanent college file.

4. College Board Examinations or American College Testing Scores: Applicants are not required to submit results of CEEB or ACT tests. A candidate's overall academic record will always be considered first, with motivation, discipline, personality, and sensitivity viewed as important factors. If submitted, the CEEB or ACT scores will probably be helpful to the Admissions and Student Aid Committee in reaching a decision, but they will play a secondary role. The candidate is responsible for making arrangements to take the College Board examinations and to see that Bowdoin receives the scores if he or she wants them to be considered as part of his or her application. Should Bowdoin receive the scores on the secondary school transcript, these scores will be inked out before the folder is read by the Admissions and Student Aid Committee. Candidates may report their scores or instruct the College Board to send the scores to Bowdoin. Students choosing to submit

their SAT and Achievement Test scores should complete the entire battery of examinations no later than January of the senior year.

Bowdoin is particularly attracted to the student who seeks out and excels in a demanding college preparatory curriculum. Its policy regarding the CEEB or ACT test scores favors the student who is a superior achiever in the classroom but who may not fare so well on national standardized tests. Eighty-five percent of the public school graduates in the Class of 1992 ranked in the top 10 percent of their senior classes.

N.B.—Since standardized test results are used for academic counseling and placement, all entering freshmen are required to submit scores over the summer prior to enrolling.

5. **Visit and Interview:** A personal interview at Bowdoin with a member of the admissions staff or Senior Interviewer is strongly encouraged but not required. Distance alone sometimes makes it impossible for candidates to visit the College. The Bowdoin Alumni Schools and Interviewing Committees (BASIC) are available in most parts of the country to assist those applicants. For further information see page 312. Candidates' chances for admission are not diminished because of the lack of an interview, but many times the interview impressions prove helpful in reaching a decision. In the Bowdoin interview students should be prepared to talk informally about their academic record (an unofficial transcript is helpful), interests, talents, and goals. Ten carefully selected and trained Bowdoin seniors conduct interviews to supplement regular staff appointments from September to January.

The Admissions Office is open for interviews throughout the year except from January 15 to April 15, when the staff is involved in the final selection of the class.

6. **Notification:** All candidates will receive a final decision on their application for admission by mid-April. A commitment to enroll is not required of any candidate (except those applying for Early Decision) until the Candidates' Common Reply date of May 1. Upon accepting an offer of admission from Bowdoin a student is expected to include a \$200 admissions deposit, which is credited to the first semester's bill.

7. Candidates requiring an application fee waiver may petition for one through their guidance counselor using the standard CEEB form.

Deferred Admission: Admitted students who wish to delay their matriculation to the College for one year in order to gain increased maturity or experience may request a deferment from the director of admissions. It is Bowdoin's policy to honor these requests and to hold a place in the next entering class for these students. A \$200 admissions deposit must accompany the deferral request.

Admission with Advanced Standing: Bowdoin participates in the CEEB Advanced Placement program and the International Baccalaureate

Program and grants both advanced standing in courses and credit toward graduation to qualified students. Examinations in Advanced Placement subjects are given by the CEEB in May of each year, and students are granted placement or credit on the basis of their examination performance. In most departments, a score of 3, 4, or 5 results in students' being given credit for one or two semesters of college-level work in the subject; if students elect to continue that subject in college, they are given appropriate placement. A judgment on an entering student's departmental placement will be made during the course registration period through personal conferences with appropriate faculty members.

Candidates not offering Advanced Placement examination results may secure advanced placement by passing a qualifying examination at the College. Bowdoin recognizes the place of more advanced courses in secondary school and provides an opportunity for unusually qualified students to extend the range of work that they may do in school and college. Occasionally, students may gain sufficient credit to enable them to complete their college program in fewer than eight semesters. Applicants are strongly encouraged to take advantage of the Advanced Placement program and should request consideration for Advanced Placement and credit by arranging for all Advanced Placement Test scores to be sent to the Admissions Office.

A minimum grade of 5 is required to receive credit for the International Baccalaureate Program. In addition, to receive credit, students must take a higher level course in the appropriate department and cannot take a lower level course in the department.

Departments may opt to use the International Baccalaureate as a guide to placement only, not for credit. Departments may choose to require the taking of a placement exam before granting credit.

Credits Earned before Matriculation: Freshmen may apply a maximum of eight course credits toward the degree from the following sources: Advanced Placement Program, International Baccalaureate Program, and college credits from other institutions earned prior to matriculation.

Transfer Students: A limited number of students from other colleges and universities will be admitted each year to upper-class standing at Bowdoin. The following information pertains to transfer candidates:

1. Candidates should file a transfer application by April 15, and must arrange to have submitted at the same time transcripts of their college and secondary school records, statements from deans or advisers at their colleges, and at least two recommendations from current or recent professors. As soon as it becomes available, an updated transcript including spring semester grades should also be sent. Candidates whose applications are complete will normally be notified of Bowdoin's decision by late May. Deadline

for mid-year transfers is November 15; mid-year candidates are notified by early January.

2. Transfer candidates should have academic records of honors quality ("B" work or better) in a course of study which approximates the work that would have been done at Bowdoin, had they entered as freshmen. Bowdoin accepts transfer credit for liberal arts courses in which a grade of "C" or higher has been received. Further, transfer students should understand that although they may expect an estimate regarding class standing upon transferring, official placement is possible only after updated transcripts have arrived at our Registrars' Office and have been appraised by the dean of the College and appropriate department chairmen.

3. Candidates entering the junior year will be given preference. Two years of residence is required for a bachelor's degree from Bowdoin. Students who have completed more than four semesters of college work are not eligible to transfer. Candidates must present one full year of academic credit to be considered for transfer.

4. The funds available for transfer students are limited by commitments the College has already made to needy enrolled students and incoming freshmen. All transfers are eligible for aid, based on financial need. Applicants for aid must file a Financial Aid Form with the College Scholarship Service by April 1.

Special Students: Each semester, as space within the College and openings within courses permit, Bowdoin admits a few special students who are not degree candidates. In general, this program is intended to serve the special educational needs of residents in the Brunswick area. Those who already hold a bachelor's degree from a four-year college are ineligible for the program. One or two courses are charged at a special rate of \$610 and no more than two courses can be taken each semester. No financial aid is available for special students. Inquiries should be addressed to the transfer coordinator in the Admissions Office.

PROCEDURE FOR APPLICATION FOR FINANCIAL AID

Bowdoin is one of more than 1,000 colleges that ask candidates for financial aid to file information through the College Scholarship Service, CN6300, Princeton, New Jersey 08541, or P.O. Box 380, Berkeley, California 94701. This organization has been formed to simplify application procedures and to make decisions on awards as equitable as possible. Each applicant for financial aid must submit the Bowdoin Financial Aid Application (which is included with the Application for Admission) and must also obtain the Financial Aid Form (FAF) from his or her school and request the College Scholarship Service to forward a copy of this statement to Bowdoin. March 1 is the deadline for filing these applications (or December 1 for Early Deci-

sion applicants). Candidates should not be discouraged from applying to Bowdoin College for lack of funds. Because of its extensive scholarship grant and loan programs, Bowdoin's financial aid policy is designed to supplement family efforts so that as many students as possible can be admitted each year with the full amount of needed financial assistance. In 1987-1988, approximately 40 percent of the entering class of 397 students received financial assistance. The amount of assistance intended to meet the individual's need is calculated from the information in the Financial Aid Form. The average award of grant and loan was about \$9,383. Additional material about the program of financial aid at Bowdoin may be found on pages 74-79. Awards of financial aid are announced with the letters of admission.

All correspondence concerning freshman and transfer admission to the College and scholarship aid should be addressed to the Director of Admissions, Bowdoin College, Brunswick, Maine 04011; telephone (207) 725-3100.

Scholarships, Loans, and Financial Aid

SCHOLARSHIP GRANTS, loans, and student employment are the principal sources of aid for Bowdoin students who need help in meeting the expenses of their education. Bowdoin believes that students who receive financial aid as an outright grant should also expect to earn a portion of their expenses and that they and their families should assume responsibility for repayment of some part of what has been advanced to help them complete their college course. Grants will total about \$4,100,000 in 1988-1989 and will be made to about 38 percent of the student body. All awards are made on the basis of satisfactory academic work and financial need, which is a requisite in every case. The financial aid program is coordinated by the director of student aid, to whom all applications, except those from students not yet enrolled in college, should be directed. Prospective freshmen should submit their applications to the director of admissions.

The College provides about \$750,000 to aid recipients each year from loan funds under its control; another \$750,000 in loan aid comes from private lenders under the terms of the Guaranteed Student Loan program. Long-term loans continue to be an integral part of financial aid, supplementing scholarship grants. On recommendation of the director of student aid, long-term loans may also be made to students not receiving scholarship grants. These loans, including Guaranteed Student Loans, Perkins Loans, and Bowdoin College Consolidated Loans, bear no interest during undergraduate residence. Interest is charged at 5% for the latter two loans; interest on Guaranteed Student Loans is set at 8%. Payment over a ten-year period is called for beginning six months after graduation or separation; or after graduate school, two or three years of deferment for various categories of service or internships. Perkins Loans also provide for the waiver of some payments for persons who become teachers and/or who serve in the military. Small, short-term loans are available upon application at the Business Office.

The student employment program offers a wide variety of opportunities to undergraduates. These include direct employment by the College, employment by the fraternities, and employment by outside agencies represented on the campus or located in the community. Employment opportunities are open to all students who are interested, able, and willing to work. Commitments for employment are not made to freshmen until after the opening of college in the fall. The College participates in the Work-Study Program established under the Economic Opportunity Act of 1964, the Supplementary Educational Opportunity Grants Program established under the Higher Education Act of 1965, and the Pell Grant Program established under the Higher Education Amendments of 1972. The College also works closely with several states which can provide handicapped students

and those receiving other forms of state aid with financial assistance to help with their educational expenses.

Prematriculation Scholarships: About 150 freshmen each year receive prematriculation awards to help them meet the expenses of their first year. Recently the range of awards has extended from \$500 to \$16,500. As noted above, some awards are direct grants, but most include the tender of loans. The size and nature of these awards depend upon the need demonstrated by the candidates. Applications should be made to the director of admissions by March 1 of each year. Candidates will be notified of a prematriculation award at the time they are informed of the decision on their applications for admission, usually about April 15.

The general basis for determining the amount of all prematriculation scholarships is the individual's financial need. Need is determined by an analysis of the statements of financial resources submitted to the Financial Aid Office on the aid forms.

Freshmen who hold prematriculation awards may be assured of continuing financial aid that meets their needs in the upper-class years if grades each semester are such as to assure progress required for continued enrollment (see General Regulations, Section 8, page 82). In each upper-class year the proportion of financial aid offered as a grant will be progressively decreased, and that offered as a loan increased, except in the case of certain scholarships where the full award must be made as an outright grant.

All awards of financial aid made in anticipation of an academic year, including the freshman year, will remain in effect for the full year unless the work of the holder is unsatisfactory. Awards for such students may be reduced or withdrawn for one semester. Awards may also be reduced or withdrawn for gross breach of conduct or discipline.

General Scholarships: Awards similar to prematriculation scholarships are granted to undergraduates already enrolled in college on the basis of their academic records and their financial need. Normally, these awards are made at the end of one academic year in anticipation of the next, but applications may be made in November for aid to be assigned during the spring semester on a funds-available basis. Awards made for a full year are subject to the same provisions covering prematriculation awards, but those made for a single semester are not considered as setting award levels for the following year. Since its founding, Bowdoin College has been fortunate to have had many close friends, including alumni, faculty, and others, who have either bequeathed or made outright gifts in support of its endowment for scholarships. Bowdoin College issues a separate publication honoring those in whose names scholarships and book funds have been donated.

Information on the availability of scholarship and loan funds may be obtained through the College's Student Aid Office. Questions regarding the establishment of such funds should be directed to the Development Office.

Loan Funds: Loans are offered as complementary aid to scholarships in almost every case. The College has a number of loan funds of its own through the generosity of a variety of donors, and these are listed in a separate publication along with scholarship and book funds.

Employment Assignments: So far as practicable, all college student jobs paying more than \$200 a year will be assigned to students of recognized need, although most students must find their own jobs on campus. The annual student payroll is currently about \$450,000.

Graduate Scholarships: These awards are made to students who have completed their work at Bowdoin and are pursuing advanced study at other institutions. Application should be made in writing to the director of student aid. They are described below.

Graduate Scholarships

ARTS AND SCIENCES

Charles Carroll Everett Scholarship: A fund bequeathed by Mildred Everett in memory of her father, Charles Carroll Everett, D.D., of the Class of 1850, the net income of which is given to that graduate of Bowdoin College whom the president and faculty shall deem the best qualified to take a postgraduate course in either this or some other country. (1904)

Timothy and Linn Hayes Scholarship Fund: A fund given by Timothy and Linn Hayes for support of postgraduate or undergraduate studies in the social sciences, i.e., those branches of knowledge which deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society. (1970)

Guy Charles Howard Scholarship: A fund bequeathed to the College by Ethel L. Howard in memory of her brother, Guy Charles Howard, of the Class of 1898, the income of which is to be used to enable "some qualified student to take a postgraduate course in this or some other country, such student to be designated by the Faculty." (1958)

Henry W. Longfellow Graduate Scholarship: A fund given by the daughters of Henry W. Longfellow, of the Class of 1825—Alice M. Longfellow, Edith L. Dana, and Annie L. Thorpe—for a graduate scholarship "that would enable a student, after graduation, to pursue graduate work in some other college, or abroad if considered desirable; the work to be done in English, or general literature, and the field to be as large as possible—Belles Lettres in a wide sense. The student to be selected should be one not merely proficient in some specialty, or with high marks, but with

real ability in the subject and capable of profiting by the advanced work, and developing in the best way.” (1907)

The Wilmot Brookings Mitchell Graduate Scholarship: An award from a fund established by Hugh A. Mitchell, of the Class of 1919, “to honor the memory of my father and his love for Bowdoin.” Professor Mitchell was a member of the Class of 1890 and from 1893 to 1939 Edward Little Professor of Rhetoric and Oratory. The award is made by the president upon recommendation of a committee composed of the three senior professors of the Department of English “to a member of each graduating class who has majored in English and intends to teach English, the winning candidate to be selected on the basis of character as well as superior ability and talent for teaching.” The award is to be used to help defray the costs of graduate work in a leading university in this country or England. (1965)

Galen C. Moses Postgraduate Scholarship: A fund bequeathed by Emma H. Moses in memory of her husband, a member of the Class of 1856, the income to be awarded and paid to the student most proficient in any natural science during his or her undergraduate course, who shall actually pursue a postgraduate course in such science at any recognized college or university; said income to be paid to such student for a period not exceeding three years, unless he or she sooner completes or abandons said postgraduate course. (1934)

O’Brien Graduate Scholarship: A fund given by Mrs. John Washburn, of Minneapolis, in memory of her uncles, John, William, Jeremiah, and Joseph O’Brien, for a “scholarship, preferably a graduate scholarship, for a student, or students, to be selected annually by the Faculty, who shall be deemed most suitable to profit by travel or advanced study, either in this country or abroad.” (1937)

Nathan Webb Research Scholarship in English or English Literature: A fund bequeathed to the College by Dr. Latham True in memory of his wife’s father, the Honorable Nathan Webb, LL.D., the income to be used to support a scholarship of \$1,200 annually. The recipient must have received an A.B. from Bowdoin, preferably be unmarried, and use the scholarship in the study toward a Ph.D. “If deemed advisable, the said scholarship may be awarded to the same student for two or three years in succession, but no longer.” (1963)

LAW AND MEDICINE

Garcelon and Merritt Fund: An award from the income of this fund, established in memory of Seward Garcelon, of the Medical Class of 1830, and Samuel Merritt, of the Medical Class of 1843, is appropriated annually for medical scholarships. The larger part of the amount is awarded to students

pursuing their studies in medical schools, and the remainder may be assigned to students in the College who are taking premedical courses; but, at the discretion of the Board of Trustees, all of the income available may be assigned to students in medical schools.

Awards are made only to worthy and struggling young students "in need of pecuniary aid," and preference is given to graduates and former students of Bowdoin College. Applications from those not graduates or former students of Bowdoin College, but who are residents of the State of Maine, may be considered after they have completed one year in medical school.

(1892)

George and Mary Knox Scholarship Trust: A fund created under the will of George B. Knox, of the Class of 1929, for scholarships to be used for Bowdoin graduates attending Harvard Business, Law, and Medical Schools.

(1984)

Lee G. Paul Scholarship: A fund given by Lee G. Paul, of the Class of 1929, the income to be used to provide financial assistance to graduates attending the Harvard University School of Law and requiring financial aid.

To qualify for a scholarship award from this fund a student must have been admitted to the College only after meeting all requirements for admission applicable to all candidates for admission and must have met during his undergraduate years at the College at least the minimum standards of performance expected of all students.

There is to be no discrimination either in favor of or against any student because of race, color, creed, sex, or disadvantaged background in the award of scholarships from this fund.

(1964)

Dr. Clinton Noyes Peters and Alice F. Peters Medical Education Fund: A fund established by the will of Clinton N. Peters, M.D., of the Class of 1910 and the Medical School Class of 1914, the income of which is to be used to aid Maine-born medical students who are graduates of the College and have been accepted by or are attending medical school. Any funds not used for medical school scholarships shall be used for aid to Maine-born undergraduates who have indicated an intention to attend medical school.

Robinson-Davis Fund: A fund given in trust under the will of Beatrice R. Davis in memory of Frank W. Robinson and Dr. Horace A. Davis, the income to be used to provide graduate scholarships for students, preferably natives and residents of Maine. Forty percent of the income is to be used for those who intend to study and practice law. The balance is for those who intend to study and practice medicine.

(1972)

Earl Kendall Van Swearingen Scholarship Fund: A fund established by the bequest of Eleanore Maria Van Swearingen, the income to be used to support a "scholarship or scholarships to be awarded to the best premedical students for their medical education."

(1969)

MISCELLANEOUS

Harold Hitz Burton Student Book Fund: A fund given in honor and memory of the late Honorable Harold Hitz Burton, LL.D., of the Class of 1909, by members of the Bowdoin Club of Washington and others to assist needy Bowdoin undergraduates in the purchase of books required in their courses. Administered by the dean of students. (1967)

Class of 1940 Memorial Fund: A fund to be used for the assistance of students or for such other purposes as the President and the Governing Boards may from time to time deem more useful. (1988)

Computer Loan Fund: A loan fund established to enable members of the faculty and administrative staff to purchase computer equipment for professional and personal use. The fund is administered by a committee comprising the treasurer, the dean of the faculty, and the chair of the academic computing center committee. (1984)

Davis Fund: A fund established by Walter G. Davis to encourage undergraduate interest in international affairs. Administered in such manner as the president of the College may direct. (1934)

Mason-Le Cannellier Fund: A fund established in honor of William R. Mason and Jean and Monique Le Cannellier "for the purpose of providing loans and/or grants to admitted, nonmatriculated freshman students (with preference to those of middle-income families) to facilitate travel or the pursuit of an alternative non-academic experience for a few months or a year before the students commence studies at Bowdoin." Awards are made at the discretion of the director of admissions. (1982)

W. Cranston Brewer Memorial Fund: A fund to help individual Bowdoin undergraduates at a time of unexpected needs. (1988)

Dean Paul Nixon Discretionary Fund: A fund established by E. Jeffrey Gilman of the Class of 1940, and his wife, Barbara Drummond Gilman, in honor and memory of Paul Nixon, who joined the faculty of Bowdoin in 1909 and served as dean of the College from 1918 to 1947. The fund is administered by the dean of the College, "with an award to be made whenever the dean of the College feels that a student deserves encouragement and a 'pat on the back'—not necessarily for a great action but for any of those moments which call for a 'pat on the back.'" (1981)

John L. Roberts Fund: A fund given by John L. Roberts, of the Class of 1911, to assist some underprivileged scholar, other than a teacher or one contemplating teaching, to do research in any field he may choose. (1958)

Richard White Foundation Fund of Bowdoin College: A fund established by the Richard White Foundation to provide food and recreation at Thanksgiving and Christmas to the "two members of the freshman class most in economic need." (1978)

The Curriculum

BOWDOIN does not prescribe specific liberal arts courses for all students. Instead, each student determines, with the help and approval of an academic adviser, an appropriate pattern of courses. To ensure that students explore the breadth of the curriculum before settling upon a major, they are expected to complete two courses each in natural science and mathematics, social and behavioral science, humanities and fine arts, and non-Eurocentric studies. Courses, it is assumed, do not lead simply to other courses in the same subject. Properly taught, they should raise questions and evoke a curiosity that other disciplines must satisfy. The College also recognizes through its course offerings the importance of relating a liberal education to a society whose problems and needs are continually changing.

The breadth of a liberal arts education is supposed to distinguish it from professional training, and its depth in one field, from dilettantism, although in fact it shares qualities of both. Bowdoin encourages students to extend their concerns and awareness beyond the personal. At the same time the College helps students to integrate curricular choices in accordance with individual intellectual needs. Interaction between the students and their academic advisers is a vital part of this educational experience.

REQUIREMENTS FOR THE DEGREE

To qualify for the bachelor of arts degree, a student must have:

1. successfully passed thirty-two courses;
2. completed a departmental major or majors, an interdisciplinary major, or a student-designed major (a departmental minor may be completed with any of the preceding);
3. spent four semesters (passing at least sixteen courses) in residence, at least two of which will have been during the junior and senior years;
4. completed at least two semester courses in each of the following divisions of the curriculum: natural science and mathematics, social and behavioral sciences, humanities and fine arts; and two semester courses in non-Eurocentric studies.

GENERAL REGULATIONS

1. Course Load: Students are required to take the equivalent of four full courses each semester. Students wishing to take more than *five* courses must have permission of the Deans' Office. A student may not take five courses in the semester following the receipt of an "F" without the dean's approval. Juniors or seniors who have accumulated extra credits may apply to the

Deans' Office for permission to carry a three-course load once during their last four semesters at Bowdoin. In addition, students entering their final semester with extra credits from Advanced Placement tests, study away, or summer school may request a course load reduced by one or two courses. No extra tuition charge is levied upon students who register for more than four courses and, by the same token, no reduction in tuition is granted to students who choose to register for three courses.

2. Course Examinations: The regular examinations of the College are held at the close of each semester. An absence from an examination may result in a grade of zero. In the event of illness or other unavoidable cause of absence from examination, the Deans' Office may authorize makeup of the examination.

3. Course Grades: Course grades are High Honors, Honors, Pass, Credit, and Fail. High Honors indicates excellent work. Honors indicates good work. Pass indicates satisfactory work. Credit indicates passing work, without further distinction as to quality, in a course elected by a student to be graded on a Credit/Fail basis. Fail indicates unsatisfactory work. In independent study courses that will continue beyond one semester, instructors shall have the option of submitting at the end of each semester except the last a grade of "S" for Satisfactory in place of a regular grade. A regular grade shall be submitted at the end of the final semester and shall become the grade for the previous semesters of independent study.

4. Incompletes: With the approval of the dean and the instructor, a grade of Incomplete may be recorded in any course for extenuating circumstances such as family emergency, illness, etc. At the time an Incomplete is agreed upon by the dean, student, and the instructor, a date shall be set by which all unfinished work must be submitted by the student to the instructor. Ordinarily, this will be no later than the end of the second week of classes of the following semester. The instructor should submit a final grade within two weeks of this date. If the course work is not completed within the specified time limit, the Registrar will change the Incomplete to Fail. Any exceptions to this rule or a change of the specified time limit may require approval of the Recording Committee.

5. Credit/Fail Option: A student may elect to enroll in a limited number of courses on a Credit/Fail basis. Graduation credit is given for courses in which a grade of Credit is received. A student may elect no more than one course of the normal four-course load each semester on a Credit/Fail basis and no more than four such courses during the undergraduate career. However, a student may elect a fifth course any semester on a Credit/Fail basis. No course may be changed from graded to Credit/Fail or vice versa after the first week of classes.

6. Grade Reports: A report of the grades of each student is sent to the student at the close of each semester.

7. The Dean's List: Students who receive grades of Honors or High Honors in all regularly graded courses and Credit in all other courses for a semester are placed on the Dean's List.

8. Deficiency in Scholarship: Students are expected to make "normal" progress toward the degree. "Normal progress" is defined as passing four full-credit courses each semester. Students may not matriculate in a fall semester if they are more than two course credits short of normal progress. Students who fail to meet this matriculation standard may enroll after a suspension of at least one semester and the approval of the dean.

The records of students who fail more than one course are reviewed by the Recording Committee at the end of each semester. Students who fail three or more courses at the end of the first semester of the freshman year or who fail two or more courses at the end of any other semester are normally dismissed from the College. Students for whom dismissal is waived must take and pass four courses the following semester. Their records will be reviewed by the Recording Committee at the end of that semester. If they violate the terms of the waiver, their permanent dismissal will likely result.

Dismissed students may apply for readmission after an absence of at least one semester. Normal readmission applications consist of a petition from the dismissed students explaining their personal growth and development during the period away from Bowdoin. In addition, students must usually submit two letters of reference from non-relatives in positions to validate their experiences, which comment on students' readiness to resume quality scholarship.

Students who have been dismissed for academic deficiency are ineligible for financial aid during the first semester after readmission.

Students who merit dismissal a second time for academic failures may be permanently dismissed from the College.

9. Maximum Residency: No student will ordinarily be permitted to remain at Bowdoin for more than nine semesters of full-time work.

10. Senior Course Selection: A student may be required to take a course in his or her major department in each semester of the senior year at the department's discretion.

11. Leave of Absence: A student in good standing may, with the approval of his or her adviser, apply to the Recording Committee for a leave of absence for nonacademic pursuits for one or two semesters. The leave must begin at the end of a regular semester. A student on approved leave is eligible for financial aid upon his or her return. A student wishing to apply for a leave of absence for one or both semesters of an academic year must submit an application by April 1 of the previous academic year. Applications for leave of absence submitted during the fall semester requesting a leave for the next spring semester will be considered only in the most urgent circumstances. Academic credit may not be transferred to Bowdoin for courses taken while on leave.

ADVISING SYSTEM

Each student is assigned an academic adviser, generally from the faculty, at the start of the freshman year. Students generally maintain this relationship for the first two years. Whenever possible, the Dean of Students assigns advisers on the basis of students' intellectual interests. Advisers and students meet regularly during orientation prior to fall semester's classes and on an individual basis thereafter.

During the first week of classes the student selects courses and receives approval from the adviser through a signature on the registration card. Should a student and adviser find themselves in disagreement over the wisdom of the selection, a subcommittee of the Recording Committee acts as arbiter.

Students elect a major during the second semester of the sophomore year. After registering for a major, a student is advised by a member of his or her major department.

DISTRIBUTION REQUIREMENTS

Distribution requirements should normally be completed by the end of the sophomore year. Students must take two courses from each of the three divisions of the curriculum, as well as two courses in non-Eurocentric studies. A course which satisfies the non-Eurocentric studies requirement may also count for its division. Because these requirements are intended to apply to the college liberal arts experience, they may not be met by advanced placement or international baccalaureate credits, but can be met, under the supervision of the Recording Committee, by credits earned while studying away from Bowdoin. Areas of distribution are defined as follows:

Natural Science and Mathematics: Biochemistry, biology, chemistry, computer science and information studies, geology, mathematics, physics, neuroscience, and certain environmental studies courses.

Social and Behavioral Sciences: Afro-American studies, economics, government, psychology, sociology and anthropology, and certain environmental studies courses.

Humanities and Fine Arts: Art, classics, education, English, dance, German, history, music, philosophy, religion, Romance languages, and Russian.

Non-Eurocentric Studies: Students must take two courses that focus on a non-Eurocentric culture or society, exclusive of Europe and European Russia and their literary, artistic, musical, religious and political traditions. The requirement is intended to introduce students to cultures fundamentally different from their own and open their minds to different ways in which other people perceive and try to cope with the challenges of life. Though courses treating North American and European topics will not normally

count toward this requirement, courses on Afro-American or Native American cultures will meet the requirement when the emphasis is clearly on those cultures and their differences from the predominant culture of the United States. *Language courses do not meet this requirement.* Approved courses are indicated by a dagger (†) in the list of "Courses of Instruction" in this catalogue.

THE MAJOR PROGRAM

Students may choose one of five basic patterns to satisfy the major requirement at Bowdoin: a departmental major, two departmental majors, an interdisciplinary major, a student-designed major, or any of the preceding with a departmental minor. Each student must choose a major by the end of the sophomore year after consultation with the department or departments involved. No student will be accepted as a major in any department until that student has passed the courses required for admission to that major. Seniors may add or change majors and/or minors until the end of the first semester of their senior year. Changes by seniors in interdisciplinary or self-designed majors require the approval of the Recording Committee. A student who has not been accepted in a major department cannot continue registration.

Options for major programs are described below.

Departmental Major

All departments authorized by the faculty to offer majors specify the requirements for the major in the catalogue. A student may choose to satisfy the requirements of one department (single major) or to satisfy all of the requirements set by two departments (double major). A student may drop a second departmental major by notifying both the registrar and the department concerned at any time.

Interdisciplinary Major

As the intellectual interests of students and faculty alike have reached across departmental lines, there has been a growing tendency to develop interdisciplinary majors. Interdisciplinary majors are designed to tie together the offerings and major requirements of two separate departments by focusing on a theme that integrates the interests of those two departments. Such majors usually fulfill most or all of the requirements of two separate departments and usually entail a special project to achieve a synthesis of the disciplines involved.

Anticipating that many students will be interested in certain patterns of interdisciplinary majors, several departments have specified standard requirements for interdisciplinary majors. For descriptions of these interdisciplinary majors see pages 179-181.

A student may take the initiative to develop an interdisciplinary major by consulting with the chairs of the two major departments. A student may not select an interdisciplinary major after the end of the junior year.

Student-Designed Major

In some cases, a student may wish to pursue a major program that does not fit either of the patterns described above. The faculty has authorized a pattern which permits a student working together with two faculty members to develop a major program that may draw on the offerings of more than two departments. Guidelines for the development of student-designed majors are available from the Registrar's Office. No student may apply for a student-designed major after the end of the sophomore year.

Departmental Major and Departmental Minor

Students may fulfill the major requirements of one department and meet the minor requirements of any other department or program, subject to the approval of that department or program.

The Minor

All departments and some programs offer a minor program consisting of no fewer than four courses and no more than seven courses including all prerequisites. A minor program must be planned with and approved by the student's major department, and approved by the student's minor department. A minor may be dropped at any time by notifying both the registrar and the department or program concerned, but may not be added after the end of the first semester of the senior year.

INDEPENDENT STUDY

With departmental approval, a student may elect a course of independent study under tutorial supervision. A department will ordinarily approve one or two semesters of independent study for which regular course credit will be given. A definite plan for the project approved by the department and the tutorial adviser must be presented to the registrar by the end of the first week of classes. Where more than one semester's credit is sought for a project, the project will be subject to review by the department at the end of the first semester. In special cases the Recording Committee, upon recommendation of the department, may extend credit for additional semester courses beyond two. In independent study courses that will continue beyond one semester, instructors have the option of submitting at the end of each semester except the last a grade of "S" for satisfactory in place of a regular grade. A regular

grade will be submitted at the end of the final semester of independent study and will become the grade for the previous semesters of independent work.

There are normally two kinds of independent study and each should be registered for under the appropriate course number. A directed reading course designed to allow a student to explore a subject not currently offered within the curriculum shall be numbered 291, 292, 293, or 294. An independent study that will culminate in a substantial and original research, fine art, music or creative writing project or which is part of a departmental honors program shall be numbered 401 or higher. In most departments the project will consist of a written dissertation or an appropriate account of an original investigation, but projects in music, the fine arts, and letters are also encouraged. Independent study may not be taken on a credit/fail basis.

OFF-CAMPUS STUDY

Bowdoin offers its students the opportunity to participate in a variety of programs sponsored by other institutions and organizations. Study away must be approved by the College's Recording Committee and the student's major department; requests must be submitted to the Registrar prior to the Friday before spring vacation of the year preceding attendance. Many specific programs and requirements for participation in them have been approved (see page 92 for information on Twelve College Exchange).

Foreign study: Students may apply for study in virtually any country. The Deans' Office has a list of over 125 programs that have been approved; students should consider these first. Information, including student evaluations, is also available from the Deans' Office. Bowdoin has an exchange program with the University of Dundee in Scotland.

Some language study is encouraged for programs in countries with primary languages other than English but is not required by Bowdoin, although individual programs may have their own requirements. Deadlines for application to foreign programs vary; a student should consult with the dean well before the spring vacation of the year preceding anticipated participation.

Domestic study: Study at other institutions in the United States should be considered primarily as an extension of Bowdoin's academic program. Therefore, a student's academic motivation is the essential criterion for approval. Bowdoin has a number of defined exchange programs; to attend any institution not currently approved, a student must, after consultation with his or her adviser, present evidence that the study requested will be undertaken in at least a comparable academic environment. It is the student's responsibility to apply to Bowdoin and to the other institution for acceptance.

Approved programs include the City Semester at Boston University, Williams College/Mystic Seaport Program, the National Theater Institute,

Washington Semester programs of American University and Boston University, Tougaloo College, SEA Semester at Woods Hole, and the Twelve College Exchange (see page 00). Forms for and information about these programs are available in the Deans' Office.

In all off-campus study programs, credit will be transferred only for grades of "C-minus" or better, and an official transcript must be submitted to Bowdoin's registrar.

THE AWARD OF HONORS

Departmental Honors

The degree with *honors*, *high honors*, or *highest honors* in a major subject is awarded to students who have distinguished themselves in that subject. The award is made by the faculty upon recommendation of the department. It is based upon honor grades in at least a majority of major courses, honor grades in any departmental special major requirements, and honor grades in independent study in the major department.

All written work in independent study accepted as fulfilling honors requirements shall be deposited in the library in a form specified by the Library Committee.

General Honors

General Honors are awarded on the basis of a student's final six semesters at Bowdoin, except that a student who receives a Failure in any course at Bowdoin or in any course at an institution from which academic credit is being transferred to Bowdoin is normally not eligible for General Honors. No student who has studied at Bowdoin for fewer than six semesters is eligible.

A degree *cum laude* shall be awarded to a student who receives at least 75 percent Honors or High Honors. Within the honor grades, there must be two High Honors for each Pass.

To receive a degree *magna cum laude* a student shall fulfill the requirement for a degree *cum laude*, with the additional stipulation that at least 30 percent of the student's grades must be High Honors in addition to the High Honors balancing the Passes.

A degree *summa cum laude* shall be awarded to a student who receives at least 70 percent High Honors and the balance Honors.

SPECIAL PROGRAMS

Architectural Studies

Although the College offers no special curriculum leading to graduate study in architecture, students interested in a career in this field should

consult with members of the Studio Art Division of the Department of Art as early as possible. In general, students should develop the ability to conceive and to articulate architectural and spatial concepts in two and three dimensions and visual ideas through drawing model making. The recommended course may be found on page 105.

Arctic Studies

A concentration in arctic studies, offered through the Department of Sociology and Anthropology and the Peary-MacMillan Arctic Museum and Arctic Studies Center, provides students with opportunities to explore cultural, economic, and environmental issues involving arctic lands and peoples. Students interested in the Arctic are encouraged to consult with the director of the Arctic Studies Center in order to plan an appropriate interdisciplinary program, involving course work and fieldwork at Bowdoin and at The Center for Northern Studies, Wolcott, Vermont.

Beijing Program

The Beijing Program combines intensive Chinese language study with courses on contemporary Chinese society and history. The program, presently in its fifth year, is open to twenty-five students with a serious interest in China from Bates, Bowdoin, Colby, Hampshire, Hobart and William Smith, Mount Holyoke, and Williams Colleges. It provides an opportunity to gain a first-hand understanding of contemporary China through course work and guest lectures, frequent field trips, travel to other parts of China, and introductions to Chinese college students. It is strongly encouraged that students stay in the program for both the fall and spring semesters.

Freshman Seminars

The importance of good writing to a student's success in college is obvious. The purpose of the freshman seminar is to introduce the academic discipline in which the seminar is offered and, in a broader sense, to contribute to a student's understanding of the ways in which a specific discipline may relate to other areas in the humanities, social sciences, and sciences. A major emphasis of each seminar will be placed upon the improvement of the student's individual skills—his or her ability to read texts effectively, to write prose that is carefully organized, concise, and firmly based upon evidence.

Each year a number of departments offer freshman seminars. Enrollment in each is limited to sixteen students. Sufficient seminars are offered to ensure that every freshman will have the opportunity to participate during at least one semester of the freshman year. Registration for the seminars will take

place before registration for other courses, to facilitate scheduling. Students with serious writing problems are identified by the Deans' Office and are advised to enter a special tutorial program.

Seminars to be offered in 1988-89 are listed below and are described under the appropriate departments:

<i>Fall</i>	<i>Spring</i>
Asian Studies 15 (same as Religion 15)	Art 10
Economics 10 (same as Women's Studies 10)	Asian Studies 12 (same as Religion 12) and 21 (same as History 21)
English 10-19 (13, 16, 18 same as Women's Studies)	English 20-27 (24, 26 same as Women's Studies)
German 11	Environmental Studies 11
History 13, 14	History 10, 18, 21
Philosophy 13, 15, 16	Music 10
Religion 15	Women's Studies 24, 26
Romance Languages 10	
Women's Studies 10, 13, 16, 18	

Health Professions

Students contemplating the study of medicine, dentistry, or one of the other health professions are advised to discuss their undergraduate course with the adviser for the health professions, Roy E. Weymouth, Jr., M.D., college physician. A meeting of students interested in the health professions is held at the opening of college each fall. Other meetings intended to be of help and interest to students preparing for health professions are announced during the year.

Independent Language Study

For a detailed description of this program, see page 178.

Intercollegiate Center for Classical Studies in Rome

The Intercollegiate Center for Classical Studies in Rome, established in 1965, provides undergraduates with an opportunity to study Greek and Latin literature, ancient history and archaeology, and ancient art. Students must take four courses, and may take a fifth. The center operates two semesters each academic year. Further information about the program may be obtained from John W. Ambrose, Jr., in the Department of Classics.

Intercollegiate Sri Lanka Educational (ISLE) Program

Bowdoin is the agency college of the ISLE Program, an academic year-long (August-April) study-away program located in Kandy, Sri Lanka, formally affiliated with the University of Peradeniya (formerly, the University of Sri Lanka). Bates, Carleton, Colby, Hobart and William Smith, and Swarthmore are sponsoring colleges. The program is designed to provide an authentic intellectual and cultural experience for fifteen to twenty students of advanced standing with demonstrated academic interests (particularly in religion, philosophy, sociology, anthropology, and history) in South Asia. Courses of instruction include Theravada Buddhist thought and practice; conversational Sinhala; and social, economic, and political history of Sri Lanka. Other courses in the humanities and social sciences are offered periodically and students are required to complete an independent study.

While in Sri Lanka, students live with host families in Kandy and are encouraged to travel extensively in India and in Southeast Asia during program breaks.

Participation in the fall semester-only is an option. Four to eight Bowdoin students participate annually. The ISLE Program also sponsors exchange students and visiting faculty from the University of Peradeniya to the campuses of the sponsoring colleges. The program was established by Bowdoin in 1981 and is scheduled to operate during the 1989-90 academic year. Interested students should consult with John C. Holt of the Department of Religion.

Legal Studies

Students considering the study of law should consult with the staff of the Office of Career Services. Members of the Legal Studies Advisory Group include Craig A. McEwen, Department of Sociology and Anthropology; Richard E. Morgan and Allen L. Springer, Department of Government and Legal Studies; and George S. Isaacson, Esq. They can advise students on the best ways to obtain coherence between a liberal arts program and the study of law and allied fields.

Bowdoin participates with Columbia University in an accelerated interdisciplinary program in legal education. Under the terms of this program, Bowdoin students may apply to begin the study of law after three years at Bowdoin. Students who successfully complete the requirements for the J.D. at Columbia also receive an A.B. from Bowdoin.

Preengineering Programs

Through an arrangement with the School of Engineering and Applied Science of Columbia University and with the California Institute of Technol-

ogy, qualified students may transfer into the third year of an engineering option after completing three years at Bowdoin. Admission is assured with the recommendation of the coordinator of the 3-2 programs. Then after the completion of two full years at the engineering school, a bachelor of arts degree is awarded by Bowdoin and a bachelor of science degree by the engineering school. The student should be aware that admission to these schools does not assure financial aid.

To fulfill the requirements of these programs, the student must start planning early. All students must take **Physics 103, 223, 227, 228, Chemistry 101, 102, Mathematics 161, 171, 181, and Computer Science 101**. In addition, a student taking the physical sequence is expected to complete **Physics 300** and an additional course in mathematics, physics, chemistry, or computer science. For the chemical sequence, **Chemistry 251, 252** is expected. The student should also have at least ten semester courses outside of physics, mathematics, chemistry, and computer science. Economics is strongly suggested.

Students who wish to complete four years at Bowdoin may apply to Columbia for admission on a 4-2 program. Students who have honor grades in the sciences and are recommended by the coordinator are automatically admitted.

Students who wish to apply as regular transfer students into the junior year of any other engineering program must make the necessary arrangements themselves. Such students should apply to the Recording Committee for permission for study away. Upon the successful completion of the engineering program, a Bowdoin degree is awarded.

Because this program requires tight scheduling of courses, students should consult regularly with James H. Turner of the Department of Physics.

The Swedish Program in Organizational Studies and Public Policy

The Swedish Program is sponsored by the University of Stockholm and a consortium of American colleges and universities, including Bowdoin. It offers students the opportunity to do either a semester's or a year's intensive study of comparative institutional organization and public policy in complex industrial societies. Most courses are interdisciplinary in nature. Required courses include Swedish language and a course on the welfare state and public policy. A sampling of elective courses for 1988-89 includes: **Industrial and Labor Relations, Women and Equality, The Psychology of the Working Environment, and The Health-Care System**. The two-week orientation and some courses involve extensive field trips. Students reside with Swedish families in and near Stockholm. The Bowdoin faculty advisor is David J. Vail, Department of Economics.

Teaching

Students interested in teaching in schools or graduate programs in education should discuss their plans with personnel in the Department of Education. The department maintains a register of students considering teaching careers. An extensive resource library contains information about graduate programs, private and public school positions, volunteer placements, and summer internships. Since students will include courses in psychology and education along with a major in a teaching field, they should make their interests known as early as possible so that schedules can be accommodated.

Preparation for teaching is a continuous concern of an academic institution. The Committee on Studies in Education expresses this concern.

Twelve College Exchange

Bowdoin has joined with Amherst, Connecticut College, Dartmouth, Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and Williams to form the Twelve College Exchange program. Students from one college may apply to study for a year at one of the other colleges. About ten Bowdoin students will participate in the exchange during 1988-89.

Bowdoin students wishing to participate in the exchange for the 1989-90 academic year should make application to the office of the Dean of the College by February 3, 1989. Detailed information on the course offerings of the participating colleges is available from the Deans' Office. Application is normally made for two semesters. The exchange affords students the opportunity to take courses that are not offered at Bowdoin or to study specialized aspects of their major fields of concentration with faculty members who have achieved preeminence in those specialties. Course work satisfactorily completed at any of the participating colleges will receive credit toward a degree at Bowdoin.

Courses of Instruction

Arrangement: The departments of instruction in the following descriptions of courses are listed in alphabetical order.

Time and Place of Classes: A schedule containing the time and place of meeting of all courses will be issued before each period of registration.

***Year Courses:** Courses marked with an asterisk are year courses and if elected must be continued for two consecutive semesters.

[Bracketed Courses]: All courses that cannot be scheduled for a definite semester are enclosed in brackets.

†Non-Eurocentric Studies Requirement: Courses marked with a dagger will satisfy one semester of the non-Eurocentric studies requirement.

Independent Study: See pages 85-86 for a description.

Prerequisites: Unless otherwise stated in the description, a course is open to all students.

Course Numbering: Courses are numbered according to the following system:

- 10-199 Freshman seminars and introductory courses
- 10-49 Freshman seminars
- 50-99 Courses intended for the non-major
- 100-199 General introductory courses
- 200-289 General intermediate-level courses
- 290-299 Independent study: Directed reading
- 300-399 Advanced courses including senior seminars and topics courses
- 400 Independent study: Original or creative projects and honors courses

Afro-American Studies

Administered by the Committee on Afro-American Studies

A. LYNN BOLLES, *Program Director*

The Afro-American Studies Major is an interdisciplinary program, designed to bring the scholarly approaches and perspectives of several traditional disciplines to bear on an understanding of black life. The study of the black experience in the United States is the central feature of the major, but emphasis is also placed on the examination of the rich and varied cultures, literature, and history of black people in Africa and in the African diaspora, including the Caribbean and Latin America. Such a systematic interdisciplinary

nary approach captures the historic, multi-faceted quality of Afro-American scholarship and allows the student to integrate effectively the perspectives of several academic departments at the College.

Requirements for the Major in Afro-American Studies: The major in Afro-American studies consists of four required core courses, a concentration of four additional courses, and a one-semester independent study project. The core courses, **Afro-American Studies 101**, **Sociology 208**, **History 261**, **History 241**, or **245**, and **English 275** or **276** have been chosen to give the student a thorough background for the study of the black experience and to provide an introduction to the varied disciplines of Afro-American studies.

The four-course concentration is intended to bring the methodologies and insights of several disciplines to a single problem or theme. Suggested concentrations are: Race and Class in American Society, Cultures of the African Diaspora, Political Economy of Blacks in the Third World, the Arts of Black America, and the coordinate major. Appropriate courses to be taken should be worked out by the student and the director of the Afro-American Studies Program. Alternatively, the student and the director may devise a concentration around another specific theme and submit a proposal to the Committee on Afro-American Studies for its approval. In addition, the independent study project, normally completed in the senior year, allows students to conduct research into a particular aspect of the black experience. Consult with the director concerning courses offered in previous years which may satisfy the program requirements.

Coordinate Major in Afro-American Studies: The purpose of the coordinate major is to encourage specialization in Afro-American studies within the framework of a recognized academic discipline. This major is, by nature, interdisciplinary, and strongly encourages independent study. The coordinate major entails completion of an ordinary departmental major in sociology and anthropology, history, economics, or government. The student is expected to take those courses within the major department which are cross-listed in the Afro-American Studies Program insofar as departmental major requirements permit. In addition, the student must take **Afro-American Studies 101** and four other courses outside the major department from a list approved annually by the Committee on Afro-American Studies. Students electing the coordinate major are required to carry out scholarly investigation of a topic relating to the Afro-American experience; not more than one of the elective courses may normally be an independent study course (**Afro-American Studies 290** or **400**).

†51. **Myth and Heroic Epic of Africa.** Spring 1989. MR. HODGE.

English translation of pantheons, tales of gods, and tales of heroes from a range of geographical areas and language groups of sub-Saharan

Africa. Comparison and contrast of form and content with each other as well as with relevant classical and European material.

†101. **African-American Cultures.** Fall 1988. MS. BOLLES.

An introduction to the study of African-American societies and peoples. Anthropological analysis of the different social formations of peoples of African descent in the New World. Selected case studies from the United States, Latin America, and the Caribbean. Examines such phenomena as New World slave systems, migration, the family, economics, and urbanization. (Same as **Anthropology 131**.)

†208. **Race and Ethnicity.** Fall 1989. THE DEPARTMENT.

The social and cultural meaning of race and ethnicity with special emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies. (Same as **Sociology 208**.)

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

†224. **Women in American Society: Implications of Race, Ethnicity, and Class.** Spring 1990. MS. BOLLES.

Addresses the question of how women's lives are affected by their being born black, Hispanic, Chicano, Asian-American, native American, ethnic white, or white, in American society. Comparative approach outlines the variation of women's experiences on the basis of their cultural, racial, and ethnic realities. Discusses economic, political, and domestic roles; social status; socialization; education; the arts; and religion as they affect each group of women.

Prerequisite: **Afro-American Studies 101**, **Anthropology 131**, or **Sociology 101**.

241. **The Civil Rights Movement.** Fall 1989. MR. LEVINE. (Same as **History 243**.)

[†244. **The Afro-American in American Society since Emancipation.**]

†245. **Afro-American Religion and Its Music: Redemption Songs.** Spring 1990. MR. STAKEMAN.

By focusing on black religious music in the Americas, this course will consider how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. The course will examine the different interactions of African and European cultures which have produced a variety of Afro-

American cultures; the social role of the black minister; the social stratification of black Protestant denominations; the social roles within church services; the social welfare functions of churches; and black millenarianism. Topics will include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music, Rastafarianism and reggae. (Same as **History 245**.)

[250. Anthropology of Development.]

†261. **An Introduction to Precolonial Africa.** Fall 1988. MR. STAKEMAN.

Selected topics in the history of Africa before European colonization, including forms of African social and political organization, the economic bases of African societies, migration as a force in African history, the structure and dynamics of the great Sudanese empires (Ghana, Mali, Songhay), the trans-Saharan trade, the impact of the Zulu on South and East Africa, theories of state formation, the East African Coastal States, the Atlantic slave trade, the Islamic revolutions in West Africa, legitimate trade in Africa, and the prelude to colonialism.

(Same as **History 261**.)

†275. **Afro-American Fiction.** Fall 1988 and Fall 1989. MS. PEMBERTON.

An examination of the development of the fictional genre of Afro-Americans, this course will trace the black American novel from its Civil War beginnings to the modern period. We will consider how these novels either challenge, deny, or mirror the American literary canon. Authors to be read include: Harriet E. Wilson, Nella Larsen, Richard Wright, Ralph Ellison, John Edgar Wideman, and Toni Morrison.

Prerequisites: An English department freshman seminar; **English 101, 102**, or a 200-level course. Note: This course will count toward the non-eurocentric studies requirement.

†276. **Afro-American Poetry.** Spring 1989 and 1990. MS. PEMBERTON.

This course will look at the development of Afro-American poetry, beginning with an examination of the oral tradition, through early twentieth century black poets, the Negritude Movement, and the revolutionary poetry of the 1960s and 70s. Poets to be read include: Paul Laurence Dunbar, Claude McKay, Langston Hughes, Margaret Walker, Amiri Baraka, Gwendolyn Brooks, and June Jordan.

Prerequisites: An English department freshman seminar, **English 101, 102**, or a 200-level course. Note: This course will count toward the non-eurocentric studies requirement.

290. Intermediate Independent Study.

†305. **The Black Aesthetic.** Spring 1989. MS. BOLLES.

An examination of the artistic expressions of black America in the

fields of dance and the visual arts. Focus on past and contemporary black artists, the social and aesthetic reasons for their work, and their contributions to art and society. African and Caribbean materials serve as points for comparison in the African diaspora tradition. Topics include traditional Afro-American arts and crafts, painting, sculpture, graffiti, and other visual media. The role of the black woman as an artist is also discussed.

Prerequisite: Two courses in anthropology, sociology, or Afro-American studies, junior standing.

400. Advanced Independent Study and Honors.

CROSS LISTINGS

Anthropology

- †132. **Latin American Societies.** Spring 1990. MS. BOLLES.
See **Anthropology 132**, page 237.

[†206. **A Cross-Cultural Perspective on Families.**]

Government and Legal Studies

102. **Caribbean Forms.** Fall 1988. MR. POTHOLM.
See **Government and Legal Studies 102**, page 160.
Class limit: 25.
- †223. **African Politics.** Fall 1988. MR. POTHOLM.
See **Government and Legal Studies 223**, page 161.
242. **Gender, Race, and Class: The Politics of Otherness.** Spring 1989.
MR. RENSENBRINK.
See **Government and Legal Studies 242**, page 162.

History

243. **The Civil Rights Movement.** Fall 1989. MR. LEVINE.
Same as **Afro-American Studies 241**, see **History 243**, page 171.
- [†244. **The Afro-American in American Society since Emancipation.**]
- †261. **Precolonial Africa: An Introduction to African History.** Fall 1988.
MR. STAKEMAN.
See **History 261**, page 173.
- †262. **Colonialism in Africa.** Spring 1989. MR. STAKEMAN.
See **History 262**, page 173.

- †264. **Islam in Africa.** Fall 1988. MR. STAKEMAN.
See **History 264**, page 174.
- †265. **Political Economy of Southern Africa.** Fall 1989. MR. STAKEMAN.
See **History 265**, page 174.
- †334. **Research in 20th Century Afro-American History.** Fall 1988. MR. LEVINE.
See **History 334**, page 177.
- †335. **The Afro-American Critique of America.** Spring 1989. MR. STAKEMAN.
See **History 335**, page 177.
- †360. **Social Issues in African Literature.** Spring 1990. MR. STAKEMAN.
See **History 360**, page 177.

Sociology

203. **The Family.** Fall 1989. MS. BELL.
See **Sociology 203**, page 232.
206. **Urban Sociology.** Spring 1990. MS. FLOGE.
See **Sociology 206**, page 232.
213. **Social Stratification.** Spring 1989. MR. ROSSIDES.
See **Sociology 213**, page 233.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.
215. **Criminology and Criminal Justice.** Spring 1989. MR. MCEWEN.
See **Sociology 215**, page 234.
Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.
218. **Sociology of Law.** Fall 1988. MR. MCEWEN.
See **Sociology 218**, page 235.
Prerequisite: Previous course in sociology or anthropology or government.

Art

ASSOCIATE PROFESSOR WEGNER, *Chair*; PROFESSORS CORNELL AND OLDS;
ASSOCIATE PROFESSOR MCKEE, *Director, Studio Art Division*;
ASSOCIATE PROFESSORS LUTCHMANSINGH AND WETHLI;
ASSISTANT PROFESSORS ANDRIULLI AND DOCHERTY; VISITING LECTURER
GLASS; INSTRUCTORS MATOSSIAN AND SALMOND.

The Department of Art comprises two programs: Art History and Criticism, and Studio Art. Majors in the department are expected to elect one of

these programs. The major in art history and criticism is devoted primarily to the historical and critical study of the visual arts as an embodiment of some of mankind's highest values and a record of the historical interplay of sensibility, thought, and society. The major in studio art is intended to encourage a sensitive and disciplined esthetic response to one's culture and personal experiences; it is designed to develop perceptual sensibility as well as creative visual thinking and formal skills in visual expression.

Requirements for the Major in Art History and Criticism: Nine courses, excluding independent study and freshman seminars. Required are: **Art 101**; **Art 212** or **226** or a course in Classical Archaeology; **Art 222**, **232**, **242**, and **252** or **254**; two of **Art 303** through **390**; and one other course chosen from Art History courses numbered between **110** and **399**. Art History majors are also encouraged to take courses in French and/or German, history, philosophy, religion, and the other arts (literature, music, theater, dance, and the visual arts).

Interdisciplinary Majors: The department participates in interdisciplinary programs in art history and archaeology, and art history and religion. See pages 179-180.

Requirements for the Minor in Art History and Criticism: The minor consists of five courses of which at least three must be at the 200 level and at least one at the 300 level.

The Major and the Minor in Studio Art are described on pages 103-106.

Courses in the History and Criticism of Art

10. Freshman Seminar. Spring 1989. Ms. SALMOND.

101. Introduction to Western Art. Fall 1988. MR. OLDS.

A chronological survey of the art of the Western world (Egypt, the Near East, Europe, and the European-based culture of North America), from the paleolithic period of prehistoric Europe to the present. Considers the historical context of art and its production, the role of the artist in society, style and the problems of stylistic tradition and innovation, and the major themes and symbols of Western art. Required of majors in Art History, majors in Studio Art, and minors in Art History. The prerequisite for most upper-level courses in the history of art.

†**110. Introduction to East Asian Art.** Spring 1989. MR. OLDS.

A chronological survey of Chinese, Korean, and Japanese art from prehistoric times to the present. Considers the painting, sculpture, and architecture of East Asia in the context of historical developments and the major religions of the Orient.

[150. Principles of Design.]

204. History of the Graphic Arts. Fall 1988. MR. OLDS.

This course will trace the origins and development of the graphic arts in Europe and America from the Renaissance through the modern era. The class will study a variety of print media—including woodcuts, engravings, drypoints, etchings, lithographs, and serigraphs—as these have been employed by masters such as Dürer, Rembrandt, Goya, Daumier, Whistler, Picasso, and Warhol. Students will have an opportunity to examine original master prints in the collections of the Bowdoin College Museum of Art, and to see certain techniques demonstrated in the graphic arts studio of the Department of Art. The course may count toward the major or minor in History of Art, and is particularly recommended for students majoring in studio art.

Prerequisite: **Art 101** or permission of the instructor.

209. Introduction to Classical Archaeology. Every fall. MR. SMITH.

(Same as **Archaeology 101**.)

210. Introduction to Classical Archaeology. Every spring. MR. SMITH.

(Same as **Archaeology 102**.)

211. The Birth of Greek Art. Spring 1989. MR. SMITH.

(Same as **Archaeology 307**.)

212. Medieval Art. Spring 1989. MR. OLDS.

Key monuments of medieval art and their respective cultures from the fall of Rome to the end of the Gothic period. The course begins with examples of early Christian art, continues with an examination of important works from the Byzantine, barbaric, and Carolingian periods, and ends with the periods of the Romanesque monasteries and Gothic cathedrals. Examples of the manuscript illuminations, ivory carvings, metalwork, tapestries, and stained glass windows for which the Middle Ages are noted are also considered.

Prerequisite: **Art 101** or consent of the instructor.

222. Art of the Italian Renaissance. Fall 1988. MS. WEGNER.

An approach to Renaissance Italian painting, sculpture, and architecture from the early fourteenth to the early sixteenth century, that is, from Giotto to Michelangelo, in their cultural contexts.

Prerequisite: **Art 101** or consent of the instructor.

232. Baroque Art. Spring 1989. MS. WEGNER.

The art of seventeenth-century Europe. The naturalistic and classical revolution in painting carried out by Caravaggio, Annibale Carracci, and their followers in early seventeenth-century Rome and the development throughout Europe of these trends in the works of Rubens, Bernini, Georges de la Tour, Poussin, and others form one major theme of

the course. The second is the rise of an independent school of painting in Holland. The development of Dutch landscape, still-life, genre, and portraiture is discussed in relation to artists such as Frans Hals, Jan van Goyen, Jacob van Ruysdael, and Jan Vermeer. The unique art of Rembrandt is studied in this context. Connections between art, religious ideas, and political conditions are stressed.

Prerequisite: **Art 101** or consent of the instructor.

242. European Art of the Nineteenth Century. Fall 1988. Ms. DOCHERTY.

The art of nineteenth-century Europe, with emphasis on France, England, and Germany, is studied in terms of the artistic movements that dominated the century: neoclassicism, romanticism, realism, impressionism, post-impressionism, and symbolism. The art criticism of Winckelmann, Baudelaire, Ruskin, and Zola; the changing relationship of art and artists to society; and the late nineteenth-century sources of modernism and the avant-garde are also discussed.

Prerequisite: **Art 101**.

252. Modern Art. Fall 1988. Ms. SALMOND.

A study of the rise and development of the Modernist movement in visual art in Europe and the Americas, beginning with the major figures of Post-Impressionism and examining in succession Expressionism, Fauvism, Cubism, Futurism, Constructivism, Dada, Surrealism, the American affinities of these movements, the Mexican muralists, and the Canadian Group of Seven. A theoretical ground for this study will be the definition of "modernism" and the problems presented by its social situation, its relation to other elements of culture, its place in the historical tradition of Western art, and its invocation of archaic, primitive, and Oriental cultures.

Prerequisite: **Art 101, 242**, or consent of the instructor.

254. Contemporary Art. Spring 1989. Ms. SALMOND.

A study of the art of Europe and the Americas since World War II, with emphasis given to the New York School. An introductory overview of Modernism will be followed by a more detailed examination in turn of Abstract Expressionism and the Minimalist developments which it partly inspired, Pop, Optical, Kinetic, Conceptual, and Environmental art, European abstraction, and the resurgence of various forms of figuration. The course will conclude with an examination of the international consequences of Modernist and contemporary developments, the impact of new electronic and technological media, and the critical debate surrounding the subject of Postmodernism and its historical attitude.

Prerequisite: **Art 101, 252**, or consent of the instructor.

[262. American Art from Colonial Times to the Civil War.]

- 264. American Art from the Civil War to the Present Day.** Spring 1989. Ms. DOCHERTY.

A continuation of **Art 262**. Stress placed on architecture through Richardson and the American tradition in painting and sculpture in the late nineteenth and twentieth centuries. Homer, Eakins, Ryder, Sargent, Whistler, Sloan, Wyeth, and other outstanding and representative artists of the period are included.

Prerequisite: **Art 101** or consent of the instructor.

Seminars in Art History and Criticism

The seminars are intended to utilize the scholarly interests of members of the department and provide an opportunity for advanced work for selected students who have successfully completed enough of the regular courses to possess a background. Admittance to all seminars requires consent of the instructor. The department does not expect to give all, or in some cases any, seminars in each semester. As the seminars are varied, a given topic may be offered only once, or its form changed considerably from time to time.

- 322. Studies in Renaissance Art: Mannerism.** Spring 1989. Ms. WEGNER.

A study of Mannerism in sixteenth-century Italy. Includes an analysis of sixteenth-century and modern definitions of the "style" of Mannerism; an examination of the interaction of Mannerist artists and their patrons; readings in translation of works by Giorgio Vasari, Baldassare Castiglione, and Niccolo Machiavelli. Among the artists covered in this course are Pontormo, Rosso, and Bronzino.

Prerequisite: **Art 222** or consent of the instructor.

- 342. Studies in Nineteenth-Century Art: Primitivism.** Spring 1989. Ms. DOCHERTY.

A study of the modern concept of the primitive as an antidote for, or alternative to, western civilization. This course will investigate ways in which the primitive has been defined, where it has been located, how it has been identified, why it has been valued, and what means civilized artists have used to regain touch with it. Class discussions and individual research projects will focus on artists and writers in both Europe and America from approximately 1750 to 1950.

Prerequisite: Consent of the instructor.

- 352. Studies in Modern Art: The Art of Modern Russia.** Fall 1988. Ms. SALMOND.

A survey of the arts of Russia in the period between 1800 and 1930, including folk art, the academic tradition, avant-garde developments in the early twentieth century, and the advent of socialist realism. The

course will trace the impact of radical social and political changes on the style and content of a national tradition.

Prerequisite: **Art 101** or permission of the instructor.

364. Studies in American Art: Isolationism and Internationalism in American Art of the 1920's and 1930's. Fall 1988. Ms. DOCHERTY.

An investigation of American culture between World War I and World War II with emphasis on ways in which the arts reveal the political, social, and economic aspirations and anxieties of this period. Issues to be addressed include expatriation of American artists and immigration of European ones, positive and negative attitudes toward the machine, art as escape vs. art as social protest, and views of the American land in prosperity and depression. Achievements in various media—architecture, painting, sculpture, photography, and literature—will be compared and contrasted.

Prerequisite: Consent of the instructor.

[382. Theory and Interpretation of Art.]

390. Studies in Art Historiography and Method: Art of the Italian and Northern Renaissance. Fall 1988. Ms. WEGNER.

An introduction to the history of the history of art and to the various methods employed in art historical or critical analysis. Readings in the works of Wolfflin, Panofsky, Gombrich, Steinberg, and others. The focus of each seminar varies with the individual instructor. Recommended for art history majors and potential majors.

Prerequisite: **Art 101**.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Studio Art

Requirements for the Major in Studio Art: Eleven courses are required in the department, to include **Art 150, 160, 250, and 260**; four other courses in the studio division, at least one of which must be numbered **270** or higher; **Art 101**; and two other courses in art history. Students undertaking an honors project in their senior year will be required to take **Art 400** in addition to the eleven courses required of the major. Majors are also strongly advised to include study of history, philosophy, religion, literature, and music among their remaining courses.

Requirements for the Minor in Studio Art: **Art 101, 150, 160, either 250 or 260**, plus two additional studio courses, at least one of which must be numbered **270** or higher.

Students wishing to pursue a joint major in studio art and some other

subject are required to take at least six courses in the division, selected to complement the other major.

Studio courses without prerequisite are frequently oversubscribed. In such cases, preference in enrollment is given to freshmen and sophomores as well as to upperclass students fulfilling requirements of the studio major or minor.

150. Drawing I. Fall 1988. MR. ANDRIULLI. Spring 1989. MS. MATOSSIAN.

An introduction to drawing, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects will entail objective observation and analysis of still life, landscape, and figurative subjects, exploration of the abstract formal organization of graphic expression, and the development of a critical vocabulary of visual principles. Lectures and group critiques augment studio projects in various drawing media.

Enrollment limited to 25 students.

160. Painting I. Fall 1988. MS. MATOSSIAN. Spring 1989. MR. ANDRIULLI.

An introduction to painting, with an emphasis on the development of perceptual, organizational, and critical abilities. Studio projects will entail objective observation and analysis of still life, landscape, and figurative subjects, exploration of the painting medium and chromatic structure in representation, and the development of a critical vocabulary of painting issues. Lectures and group critiques augment studio projects in painting media.

Enrollment limited to 25 students.

170. Printmaking I. Fall 1988. MS. MATOSSIAN.

An introduction to intaglio printmaking, including etching, drypoint, engraving, monotype, and related methods. Studio projects develop creative approaches to perceptual experience and visual expression that are uniquely inspired by the intaglio medium. Attention is also given to historical and contemporary examples and uses of the medium.

Enrollment limited to 20 students.

Prerequisite: **Art 150** or consent of the instructor.

180. Photography I. Spring 1989. MR. MCKEE.

Photographic visualization and composition as consequences of fundamental techniques of black-and-white still photography. Class discussions and demonstrations, examination of masterworks, field and laboratory work in 35mm format. Students must provide their own 35mm nonautomatic camera.

Enrollment limited to 32 students.

190. Architectural Design I. Spring 1989. MR. GLASS.

An introduction to architectural design. Studio projects develop skills in program and context analysis, conceptual design principles and processes, and presentation techniques.

Enrollment limited to 25 students.

250. Drawing II. Spring 1989. MR. CORNELL.

A continuation of the principles introduced in **Art 150**, with particular emphasis on figurative drawing. Studio projects develop perceptual, creative, and critical abilities through problems involving objective observation, gestural expression and structural principles of the human form, studies from historical and contemporary examples, and exploration of the abstract formal elements of drawing. Lectures and group critiques augment studio projects in various drawing media.

Prerequisite: **Art 150**.

260. Painting II. Spring 1989. MR. CORNELL.

A continuation of the principles introduced in **Art 160**, with studio problems based on direct experience.

Prerequisite: **Art 160**.

270. Printmaking II. Spring 1989. MR. ANDRIULLI.

Further exploration of intaglio printmaking and monotype.

Prerequisite: **Art 170** or consent of the instructor.

280. Photography II. Fall 1988. MR. MCKEE.

Review of conceptual and technical fundamentals of black-and-white photography and exploration of the different image-making possibilities inherent in related photographic media like 35mm and view cameras. Seminar discussions and field and laboratory work. Students must provide their own nonautomatic 35mm camera.

Prerequisite: **Art 180** or consent of the instructor.

350. Drawing III. Fall 1988. MR. ANDRIULLI.

A continuation of the principles explored in **Art 250**, with particular emphasis on protracted drawings. Lectures, group critiques, and written assignments augment the studio portion of the class.

Prerequisite: **Art 250** or consent of the instructor.

351. Drawing IV. Fall 1988. MR. ANDRIULLI.

Advanced projects in drawing.

Prerequisite: **Art 350** or consent of the instructor.

360. Painting III. Spring 1989. MS. MATOSSIAN.

A continuation of **Art 260**.

Prerequisite: **Art 260** or consent of the instructor.

361. Painting IV. Spring 1989. Ms. MATOSSIAN.A continuation of **Art 360**.Prerequisite: **Art 360** or consent of the instructor.**370. Printmaking III.** Spring 1989. Mr. ANDRIULLI.A continuation of **Art 270**.Prerequisite: **Art 270** or consent of the instructor.**291. Intermediate Independent Study.** THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.

Open only to exceptionally qualified senior majors and required for honors credit. Advanced studio projects undertaken on an independent basis, with assigned readings, critical discussions, and a final position paper.

Asian Studies

Administered by the Committee on Asian Studies

ASSOCIATE PROFESSOR SMITH, *Chair*; VISITING PROFESSOR ISHIDA;
ASSOCIATE PROFESSOR HOLT; ASSISTANT PROFESSORS DICKEY, GILDAY, AND
HARPER; VISITING PROFESSOR DENG; VISITING LECTURERS HOTTA AND
SOIFER; TEACHING ASSISTANT XU

Students in Asian studies focus on either the cultural traditions of East Asia (China and Japan) or South Asia (India and Sri Lanka). In completing the major, each student is required to gain a general understanding of both culture areas, to acquire a working proficiency in one of the languages of South or East Asia, to develop a theoretical or methodological sophistication in one of the disciplines constitutive of Asian studies (e.g., history, religion, literature, anthropology, etc.), and to demonstrate a degree of applied specialization. These principles are clearly reflected in the requirements set forth for an Asian studies major focusing upon the cultural traditions of East Asia and the guidelines set forth for student-designed majors focusing on South Asia. Student-designed majors focusing on cross-cultural topics in the humanities and/or social sciences are also encouraged. Normally, such cross-cultural student-designed majors will contain a strong disciplinary grounding (e.g., four courses in economics, etc.) as well as a significant number of relevant courses focused on Asia. The College is committed to expanding course offerings in Asian studies and will adapt the requirements of the major to reflect future developments in the curriculum.

Requirements for the Major Focusing on East Asia: 1) **Asian Studies 101** (an entry level course designed to provide a basic orientation to the religious and socio-cultural thought of East and South Asian civilizations);

2) two years of Chinese or Japanese language study; 3) a concentration of at least four courses (one of which must be a senior seminar or a final synthesizing project) in one academic discipline (specifically Asian religions, history, or literature); and 4) a total of eleven courses in Asian studies. It is strongly recommended that all majors focusing on East Asia complete at least one semester of study in an approved study-away program in either the People's Republic of China, Taiwan, Hong Kong, Korea, or Japan.

Guidelines for student-designed majors focusing on South Asia:

1) **Asian Studies 101**; 2) two years of Sanskrit or one year of study in an approved study-away program which includes the study of a South Asian language (e.g., Sinhala, Tamil, Hindi, Marathi, etc.); 3) a concentration of at least four courses (one of which must include a final synthesizing project) in one academic discipline (specifically Asian religion, history, anthropology, etc.); and 4) a total of eleven courses in Asian studies.

Requirements for the Minor in Asian Studies: Focus on either the cultural traditions of East Asia or South Asia by completing: 1) **Asian Studies 101**; 2) a concentration of at least three courses in one academic discipline (specifically East or South Asian religion, history, anthropology, or literature); and 3) one elective in Asian studies.

Program Honors: Students contemplating honors candidacy in the program must have established records of honors and high honors in program course offerings and clearly articulated, well-focused proposals for scholarly research. After approval of research proposals by a self-selected faculty honors committee of at least three, students write a 40-120 page thesis during the senior year and, in addition, are examined orally by the committee. It is recommended that the thesis be completed over two semesters.

Freshman Seminars in Asian Studies

†12. **Religion and Literature in Modern South Asia.** Spring 1990. MR. HOLT.

A study of the diffused presence of religion in modern South Asian cultures and societies as reflected in the writings of twentieth century European and South Asian writers. Authors include Forster (*A Passage to India*), Leonard Woolf (*A Village in the Jungle*), Hesse (*Siddhartha*), La Pierre (*City of Joy*), Narayan (*The Guide*), Murthy (*Samskara*), Nair (An Area of Darkness), and others. Enrollment limited to fifteen. (Same as **Religion 12.**)

†15. **Entertaining the Gods: Religious Feasts and Festivals.** Fall 1988. MR. GILDAY.

Religious people throughout the world depend on a variety of means to create, sustain, change, and express their world views. While we are

accustomed to thinking of words (in books, prayers, songs, stories, etc.) as the primary mode of religious expression, this course will introduce a context that engages a much wider range of creative and expressive media, including dance, music, mime, contests, and mobile displays. We will explore typical festival events from around the world in order to see what they disclose about religious cultures and the people who produce them. (Same as **Religion 15**.)

†20. **Traditional China.** Spring 1990. MR. SMITH.

Designed to teach the successful reading of primary sources: how to locate an argument, identify the author's assumptions, and draw implications from a text. After introductory lectures on the history of late imperial China (1368-1911), students read a wide variety of translated documents, including diaries, collections of religious precepts, tenancy agreements, etc. Frequent one-page papers. (Same as **History 20**.)

†21. **The Chinese Cultural Revolution.** Spring 1989. MR. SMITH.

The Cultural Revolution (1966-1976) is now condemned by the Chinese government as enthusiastically as it was once heralded. What happened? This course has two interrelated goals: to study a complex historical problem and to learn how to read critically in historical materials, both primary and secondary. (Same as **History 21**.)

Introductory, Intermediate, and Advanced Courses

†101. **Asian Civilizations.** Fall 1988. MR. SMITH.

An introduction to selected texts of South and East Asian Civilizations, emphasizing Buddhist cultures in India, Tibet, China, and Japan. Normally each week the course will meet once as a whole for lecture and once in small group discussions, in which a particular text will be analyzed in detail. Frequent short papers, several longer papers. (Same as **History 103**.)

[108. **Asian Rites and Theater.**] (Same as **English 73**.)

†110. **Introduction to East Asian Art.** Spring 1989. MR. OLDS.
(Same as **Art 110**.)

210. **The Populations of Asia.** Spring 1989. MS. FLOGE.

Analysis of the components of population in composition and dynamics in various Asian countries, in particular China, India, and Japan. Both causes and consequences of population changes will be examined. Attention will be given to such issues as population growth and economic development; national and international migration; changing age structure; family planning programs; zero population growth; and women's status. Special consideration will be given to the

relation between population dynamics and public policy decisions (one-child policies, day care, mandatory retirement).

Prerequisite: Previous course in sociology or anthropology or consent of the instructor. Offered every other year. (Same as **Sociology 230.**)

- 226. The Evolution of British India.** Fall 1988. MR. HOWELL.
(Same as **History 226.**)

- †**235. South Asian Cultures and Societies.** Fall 1988. MS. DICKEY.

An introduction to cultures and societies of South Asia, from Himalayan kingdoms and island nations to the vast sub-continent of India, Pakistan, and Bangladesh. Despite the diversity of these areas, they are linked by common threads including religious beliefs, principles of social stratification (caste and "caste-like"), roles of family members, and the legacy of colonial experiences. These institutions and symbolic patterns are examined in different parts of South Asia, and current and historical changes are discussed. The lives of people in this region are viewed through ethnographies, novels and films. (Same as **Anthropology 235.**)

Prerequisite: previous course in anthropology or South Asian studies or consent of the instructor.

- †**236. Political Identity and Leadership in South Asia.** Spring 1989. MS. DICKEY.

In South Asia, political identities are often based on "primordial" ties such as caste, religion, ethnicity, language, and region. Political leadership involves various strategies for addressing these communal interests. This course examines the development of different political identities, and the importance of issues such as personality, politics, and patronage in electoral leadership, in several South Asian countries. (Same as **Anthropology 226.**)

- [†**240. Religious Thought of Ancient India.**]

- [†**241. Hinduism in Medieval and Modern India.**]

- [†**242. Buddhist Sutras in Translation.**]

- [†**243. Theravada Buddhism, Culture, and Society.**]

- †**260. Chinese Poetry in Translation.** Fall 1988. MR. HARPER.

A survey of ancient Chinese poetry and poetics emphasizing the works of the T'ang period writers (including Li Po, Tu Fu, Wang Wei, and Li Ho). Offered in alternate years.

- †265. **Religion, Magic, and Science in Ancient China.** Spring 1989. MR. HARPER.

This course will study the interrelationship of religion, magic, and science in early Chinese civilization. Topics include fundamental symbolic systems, Shang and Chou divination, astrology, medicine, alchemy, and Taoist meditation. (Same as **Religion 228.**)

- †270. **Chinese Thought in the Classical Period.** Spring 1989. MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. Lectures provide background in the development of Chou dynasty society (ca. 1032-256 B.C.), but most work takes place in conference discussions of the philosophers' original texts and in a series of related short papers. (Same as **History 270.**)

- †273. **The T'ang.** Fall 1989. MR. SMITH.

History of China during the T'ang dynasty (609-916). Multidisciplinary investigation of: reunification, state-building, and expansion; the rise of schools of Chinese Buddhism; and elite culture, including *shih* poetry. (Same as **History 273.**)

- †274. **Chinese Society in the Ching.** Fall 1990. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644-1911). Discussion of societal relations and their justifications: state organization, human interaction, ideology. Culminates in a day-long simulation of elite society in the eighteenth century with students taking roles from merchant and local gentry to magistrate and emperor. (Same as **History 274.**)

- †275. **Modern Chinese History.** Spring 1990. MR. SMITH.

An introduction to the history of China from 1840 to the present. Studies the confrontation with western imperialism, the fall of the empire, the Republican period, and the Peoples' Republic. (Same as **History 275.**)

278. **The Foundations of Tokugawa Japan.** Spring 1989.

Addresses problems in the creation and early development of Tokugawa (1600-1868) state and society: the transformation of samurai from professional warriors to professional bureaucrats, the Confucian challenges to Buddhism, and the unanticipated growth of a quasi-autonomous culture. (Same as **History 278.**)

- †281. **Social Change in Contemporary Japan.** Spring 1989. MR. ISHIDA.

An introduction to the comparative study of an industrialized, non-western society after 1945. Main foci are changes in family, marriage, values and norms, institutions and organizations of politics, economy,

education, and religion. We will discuss secularism in belief, westernization in behavior, industrialization in production and business, and urbanization in communities, rural areas, and life styles that are factors bringing about changes in traditional, rural, and agricultural societies. (Same as **Sociology 231.**)

†282. **Sociology of Education: Contemporary Perspectives on Japanese Education.** Fall 1988. MR. ISHIDA.

A comparative study of the system and function of Japanese education. Examines education for socio-economic status and upward mobility with emphasis on science and technology rather than humanities and social sciences. Gives attention to such concepts as knowledge, values, language, and conformity. Formal education, education in business firms, life-long education, and women's education are compared between the United States and Japan. Authoritarianism, qualification, and ascriptive orientation as emphasized in Japanese education will be considered. (Same as **Sociology 216.**)

†285. **Japanese Religion and Culture I.** Fall 1989. MR. GILDAY.

Paradigmatic themes and problems addressed in classical literary, religious, and historical texts of the premodern period. Various ritual, theatrical, and artistic expressions provide a "textual" context for discussion. (Same as **Religion 224.**)

†286. **Japanese Religion and Culture II.** Spring 1990. MR. GILDAY.

An introduction to the major trajectories of Japanese religion and culture from the eighteenth to the twentieth century with particular attention to problems of continuity, change, and interpretation in light of Japan's renewed contact with the West. (Same as **Religion 225.**)

†287. **Pure Land Buddhism in Asia.** Fall 1988. MR. GILDAY.

A cross-cultural survey of Pure Land doctrine and practice in China and Japan. Although Pure Land Buddhist thought had its roots in Indian Buddhist speculation of the 1st century B.C., it did not begin to flourish as a popular movement until the 4th or 5th century of the common era, and then not in India but in China. Its subsequent importance in East Asia cannot be over-estimated, in spite of the fact that Western scholarship has often neglected it in surveys of Asian religion. We will examine both institutional and popular forms of Pure Land devotion. By exploring its various historical transformations in China and Japan we will gain insights not only into the philosophical and soteriological features which continue to sustain this movement, but also into the dynamics of sociocultural and religious change in a wider comparative sense. (Same as **Religion 287.**)

†290. **Intermediate Independent Study.**

†370. **Problems in Chinese History.** Every fall. MR. SMITH.

This course has two purposes: to survey the whole of Chinese history in order to synthesize students' previous work in this area and to write a substantial research paper in an area of the student's choice. (Same as **History 370.**)

†390. **Exoticism and the East: Encounters with Holy Others.** Spring 1989. MR. GILDAY.

In this cultural history of Western encounters with the "Orient," we will survey recurring images of Asia in the West, and reflect on the modern emergence of comparative religions and Asian studies as academic disciplines in light of these images and encounters. Beginning with Herodotus and the Hebrews, we will trace the European record of Asia through the medieval period, with its various legends and lore, and into the Ages of Enlightenment and Exploration. Finally, we will examine how these representations have been modified and yet sustained in the modern world and how these images continue to affect the way in which we perceive Asia and its religions and people even as we approach the twenty-first century. (Same as **Religion 287.**)

400. **Advanced Independent Study and Honors.**

Language Courses

Chinese 101. Beginning Chinese I. Every fall. MR. DENG.

An introduction to Putonghua (Mandarin) and the written language. Three hours a week of class plus two hours of drill. Assigned language laboratory. Enrollment limited to fifteen.

Chinese 102. Beginning Chinese II. Every spring. MR. DENG.

A continuation of **Chinese 101.** Enrollment limited to fifteen.

Chinese 203. Intermediate Chinese I. Every fall. MR. DENG.

A continuation of **Chinese 102.** Three hours of class a week plus additional hours with Chinese teaching fellow.

Chinese 204. Intermediate Chinese II. Every spring. MR. DENG.

A continuation of **Chinese 203.**

Chinese 255. Intermediate Chinese III. Every fall.

Third year study of Mandarin.

Chinese 256. Intermediate Chinese IV. Every spring.

A continuation of **Chinese 255.** May be repeated for credit.

Chinese 307. Introduction to Classical Chinese I. Every fall.

Chinese 308. Introduction to Classical Chinese II. Every spring.

Japanese 101. Beginning Japanese I. Every fall. Ms. STRONG.

An introduction to standard modern Japanese—speaking, aural comprehension, reading, and writing. Three hours a week plus assigned language laboratory at Bowdoin. (Japanese is taught at Bates College in Lewiston, Maine and is open to a maximum of five Bowdoin students. Assistance with transportation is provided.)

Japanese 102. Beginning Japanese II. Every spring. Ms. STRONG.
Continuation of **Japanese 101**.

Japanese 203. Intermediate Japanese I. Every fall. Ms. STRONG.
A continuation of **Japanese 102**.

Japanese 204. Intermediate Japanese II. Every spring. Ms. STRONG.
A continuation of **Japanese 201**.

Sanskrit 101. Introductory Sanskrit I. Fall 1988. Ms. SOIFER.

An introduction to the structure and content of Sanskrit language including basic grammar, vocabulary, and Devanagari script with primary emphasis placed on developing translation skills. Limited to fifteen students.

Sanskrit 102. Introductory Sanskrit II. Spring 1988. Ms. SOIFER.
Continuation of **Sanskrit 101**.

Courses currently approved by the faculty which may become credit-bearing courses for Asian Studies majors. These courses contain significant components focused on Asia. Students enrolled in these courses may receive Asian Studies credit upon the recommendation of the course instructor.

Anthropology 101. Introduction to Cultural Anthropology. (See page 236.)

Anthropology 222. Expressions of Culture through Performance. (See page 239.)

Economics 214. Comparative Political Economy. (See page 133.)

Economics 219. Underdevelopment and Strategies for Development in Poor Countries. (See page 134.)

Sociology 213. Social Stratification. (See page 233.)

Biochemistry

Administered by the Committee on Biochemistry

PROFESSOR HOWLAND, *Chair*

Requirements for the Major in Biochemistry: All majors must complete the following courses: **Biology 101, Biology (Chemistry) 261, 262; Chemistry 101, 102, 225, 226, 251; Mathematics 161, 171; and Physics 103.** In addition, majors must complete four courses from the following: **Biology 113, 114, 116, 201, 202, 204, 211, 212, 302, 304, 400; Chemistry 210, 252, 270, 330, 400; Physics 223, 227, 228, 260, 400.** Students may include as electives up to two 400 courses. They may petition the Committee on Biochemistry to be allowed to substitute other science courses as electives. Finally, a student intending to carry out a laboratory Independent Study course in Biochemistry should first take **Chemistry 210, Biology 211, or Biology 212.** Students taking Independent Study courses for the Biochemistry major should register for **Biochemistry 401, 402, etc.**

Biology

PROFESSOR HOWLAND, *Chair*; ASSOCIATE PROFESSOR STEINHART;
ASSISTANT PROFESSORS DICKINSON, PHILLIPS AND WHEELWRIGHT;
INSTRUCTOR HAPPEL; RESEARCH ASSOCIATE PEUSNER; LABORATORY
INSTRUCTORS BRYER, GARFIELD, WINE, AND WUNDER; JOINT APPOINTMENT
WITH CHEMISTRY: ASSOCIATE PROFESSOR SETTLEMIRE

Requirements for the Major in Biology: The major consists of seven semester-courses in the department exclusive of courses in the 400 series. Major students are required to complete five core courses including **Biology 101 and 102** and three of the following: **Biology 113, 114, 115, and 116.** Majors are also required to complete two other courses within the department as well as **Mathematics 161, Physics 103, and Chemistry 225** and are advised to complete **Biology 101 and 102** and the mathematics, physics, and chemistry courses by the end of the sophomore year. Students planning postgraduate education in science or in the health professions should note that graduate and professional schools are likely to have additional admissions requirements in mathematics, physics, and chemistry.

Interdisciplinary Major: The department participates in interdisciplinary programs in biochemistry and neuroscience. See pages 114 and 195-196.

Requirements for the Minor in Biology: The minor consists of **Biology 101 and 102**, plus two other courses, 100 level or above, appropriate to the major.

51. **The History of Science.** Fall 1988. MR. HOWLAND AND MS. JERVIS.
An introduction to the history of science. Topics will include ancient

medical practice; connections between magic, witchcraft, and science; and the history of ideas about evolution, astronomy, and mathematics.

52. Horticulture. Spring 1990. MR. STEINHART.

An introduction to ornamental horticulture and the cultivated garden plants of agriculture. Includes basic plant physiology relevant to horticulture, effects of environmental factors on plant growth, cultivation and propagation of plants, history of botany and the origins of plants of horticultural interest, plant pests and diseases, landscape and garden design, and greenhouse design. Topics of economic botany and ethnobotany are included such as plant sources of structural materials, fibers, dyes, drugs, and spices. Three hours of lecture/demonstration each week plus occasional laboratory meetings or field trips.

101. Introductory Cell Biology. Every fall. THE DEPARTMENT.

Examination of fundamental biological phenomena with special reference to cells. Topics include ultrastructure, growth and metabolism, cell division and molecular genetics, early development, immunology, membrane transport, and the interaction between viruses and host cells. Lectures and three hours of laboratory work each week. Understanding of high school chemistry is assumed.

102. Biology of Organisms and Populations. Every spring. THE DEPARTMENT.

A study of the properties of organisms and populations with evolution as a central, unifying theme. Topics include the origin of life; the mechanisms of evolution; a survey of the kingdoms of living organisms; the physiology, morphology, and development of animals and plants; and the effects of the environment on populations. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 101.**

113. Genetics. Every fall. MS. HAPPEL.

Integrated coverage of organismic and molecular levels of the genetics of eucaryotes and procaryotes. Topics include the structure and function of chromosomes, the mechanisms and control of gene expression, recombination, mutagenesis, and the determination of gene order and sequence. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 211.**

Prerequisite: **Biology 102.**

114. Comparative Physiology. Every spring. MS. DICKINSON.

The relationship between structure and function in organ systems and in invertebrates and vertebrates as a whole. The interdependency of

organ systems considered. Lectures and three hours of laboratory work or conferences each week.

Prerequisite: **Biology 102.**

115. Ecology. Every fall. MR. WHEELWRIGHT.

Principles concerning the interactions between organisms and their environment. Topics include population growth and structure, processes of speciation, succession, energy flow, biogeochemical cycling, and the influence of competition, predation, and other factors on population size and distribution. Laboratory sessions, field trips, and group research projects will emphasize developing a familiarity with the natural history of local plants and animals (both marine and terrestrial) and understanding their interactions. One weekend field trip included.

Prerequisite: **Biology 102** or consent of the instructor.

116. Developmental Biology. Every spring. MS. HAPPEL.

An examination of current concepts of embryonic development with emphasis on their experimental basis. Topics include morphogenesis and functional differentiation, tissue interaction, nucleocytoplasmic interaction, differential gene expression, and interaction of cells with hormones and extracellular matrix. Project-oriented laboratory work emphasizes experimental methods. Lectures and three hours of laboratory each week.

Prerequisite: **Biology 102.**

151. Ethology. Fall 1988. MS. MCENROE.

Animal behavior and its evolution. Topics include genetics and ontogeny of behavior, territoriality, dominance, social organizations, "altruism," sexual selection, and animal communication. Lectures and three hours of laboratory or field work.

Prerequisite: A previous college-level science course or consent of the instructor.

152. Biology of Plants. Spring 1990. MR. STEINHART.

Emphasis on the physiology of plants. Topics include the nature and control of growth and differentiation, water and nutrient translocation, metabolism, hormone physiology, and ecology of plants. Laboratory work stresses association of structure and function in tissues and organs of higher plants and includes an introduction to field botany. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 102.**

154. Ornithology. Spring 1989. MR. WHEELWRIGHT.

A study of all areas of the biology of birds, including anatomy, physiology, distribution, and classification, with an emphasis on avian

ecology and evolution. Through integrated laboratory sessions, field trips, and an independent research project, students will learn identification of birds, functional morphology, and research techniques such as experimental design, behavioral observation, and banding.

Prerequisite: **Biology 102** and/or **115**, or consent of the instructor.

156. Marine Ecology. Spring 1989. MR. GILFILLAN.

See **Environmental Studies 200**, page 149.

[158. Evolutionary Ecology.]

201. Microbiology. Every fall. MR. SETTLEMIRE.

An examination of the structure and function of microorganisms, primarily bacteria, with a major emphasis on molecular descriptions. Subjects covered include structure, metabolism, mechanism of action of antibiotics, basic virology. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 211**.

Prerequisite: **Biology 102** and **Chemistry 225**.

202. Immunology. Spring 1989. MR. SETTLEMIRE.

Covers the development of the immune response, the cellular physiology of the immune system, the nature of antigens, antibodies, B and T cells, and the complement system. The nature of natural immunity, transplantation immunology and tumor immunology also considered. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 102**.

203. Comparative Neurobiology. Fall 1988. MS. DICKINSON.

A comparative study of the function of the nervous system in invertebrate and vertebrate animals. Topics include the physiology of individual nerve cells and their organization into larger functional units, the behavioral responses of animals to cues from the environment, and the neural mechanisms underlying such behaviors. Lectures and three hours of laboratory work each week.

Prerequisite: **Biology 102**. **Biology 114** is recommended.

204. Biochemical Endocrinology. Spring 1990. MR. SETTLEMIRE.

A study of how the endocrine system is involved in the regulation of metabolism and development with an emphasis on the biochemical mechanisms. The processes involved in the production and release of the hormones also examined. Students contemplating postgraduate studies in biological science are strongly encouraged to enroll in **Biology 212**.

Prerequisite: **Biology 261**.

- 211. Laboratory in Microbiology and Genetics.** Every fall. MR. SETTLEMIRE AND MS. HAPPEL.

Lectures and laboratories to include experimental design, identification and culturing of eucaryotic and procaryotic cells, the principles of light and electron microscopy, radioisotopes, immunochemistry, cytogenetics, and recombinant DNA technology. One to two hours of lecture and three to six hours of laboratory each week. Microbiology and genetics students contemplating postgraduate studies in biological science are strongly encouraged to enroll in the laboratory course. A logical precursor to independent study in molecular biology.

Prerequisite: Concurrent enrollment in either **Biology 113** or **201**.

- 212. Laboratory in Molecular Biology and Biochemistry.** Every spring. MESSRS. HOWLAND AND SETTLEMIRE.

Experiments employing contemporary techniques in molecular biology and biochemistry. Emphasis placed on isolation and physical properties of nucleic acids, isolation and kinetics of enzymes, and composition and activities of biological membranes. Techniques studied and used include radioisotopes, spectrophotometry, electrophoresis, chromatography, scanning electron microscopy, and the use of microcomputers. This course is a logical precursor to independent study in the areas of molecular biology and biochemistry.

Prerequisite: Two from **Biology 113, 201, 261, 262**.

- 261. Biochemistry I.** Every fall. MR. HOWLAND.

Proteins and enzymes. An introduction to the chemistry and biology of small biological molecules, macromolecules, and membranes. Emphasis will be placed upon kinetics and mechanisms of enzymic reactions and upon equilibrium and non-equilibrium thermodynamics underlying biological processes.

Prerequisite: **Chemistry 226**.

- 262. Biochemistry II.** Every spring. MR. PAGE.

See **Chemistry 262**, page 122.

- 302. Virology.** Spring 1991. MR. STEINHART.

A study of plant and animal viruses beginning with lectures on fundamental virology and followed by student-led seminars based on the primary literature. The course covers taxonomy, structure, replication, pathogenesis, and epidemiological aspects of viruses.

Prerequisites: **Biology 113** or **201**.

- 303. Advanced Developmental Biology.** Fall 1989. MR. PHILLIPS.

The study of the principles and processes of embryonic and post-embryonic animal development, stressing mechanisms of cell and tissue interaction and morphogenesis. Students will read original journal

articles and participate in discussions. Laboratory projects will include the use of the scanning electron microscope to study a specific developmental question.

Prerequisite: **Biology 116** and consent of the instructor.

304. Topics in Biochemistry and Molecular Biology.

A seminar that will deal, at different times, with such topics as biological energetics, membrane biochemistry, medical genetics, the molecular biology of development, and plant molecular biology.

400. Independent Study and Honors. THE DEPARTMENT.

Chemistry

PROFESSOR CHRISTENSEN, *Chair*; PROFESSORS BUTCHER, MAYO, AND PAGE; ADJUNCT PROFESSORS GILFILLAN AND YENTSCH; ASSOCIATE PROFESSOR NAGLE; ASSISTANT PROFESSORS DOAN, STEMMLER, AND TRUMPER; DIRECTOR OF LABORATORIES FOSTER; LABORATORY INSTRUCTORS BARTLETT, BERNIER, DECOSTER, AND FICKETT; JOINT APPOINTMENT WITH BIOLOGY: ASSOCIATE PROFESSOR SETTLEMIRE

Courses are numbered to follow a general format. Courses in the 50 level are introductory, do not have prerequisites, and are appropriate for non-majors. Courses at the 100 level are introductory without a formal prerequisite and lead to advanced-level work in the department. Courses 200 through 259 are at the second level of work and generally require only the introductory course as a prerequisite. Courses 260 through 290 are normally taken in the junior year and have two or more courses as prerequisites. Courses 300 through 390 normally are taken in the junior or senior year and have two or more courses as prerequisites.

Requirements for the Major in Chemistry: The required courses are **Chemistry 101, 102, 210 or 240, 225, 226, 251, 252, 254**, three advanced courses approved by the department, and **Physics 103**. Because the department offers programs based on the interests of the student, a prospective major is encouraged to discuss his or her plans with the department as early as possible. Students, faculty members, and outside speakers lead seminars sponsored by the department and the student affiliate chapter of the American Chemical Society.

Independent Study: A student wishing to conduct a laboratory independent study project (**Chemistry 400**) must have taken at least one of the following courses: **Chemistry 254, Biology 211, or Biology 212**.

Interdisciplinary Major: The department participates in interdisciplinary programs in biochemistry and chemical physics. See pages 114 and 180.

Requirements for the Minor in Chemistry: The minor consists of **Chemistry 101 and 102**, plus three other chemistry courses appropriate to the major.

50. Topics in Chemistry.

Fall 1988. **Interactions between Society and the Atmosphere.**

MR. BUTCHER.

A consideration of some of the important issues confronting society which relate to the atmosphere. The basic scientific principles required to think about these issues are introduced. These principles applied to discussions of such topics as acid rain, the greenhouse effect, ozone, nuclear winter, and air pollution. The course presumes no background in science and is not open to students who have had a college-level chemistry course.

101. Introductory Chemistry I. Every fall. THE DEPARTMENT.

An introduction to chemistry, including chemical stoichiometry; the properties of gases, solids, and liquids; acids and bases; ionic and non-ionic equilibrium; and oxidation-reduction. Lectures, conferences, and three hours of laboratory a week.

102. Introductory Chemistry II. Every spring. THE DEPARTMENT.

Fundamental topics in inorganic and physical chemistry. Elementary thermodynamics, chemical kinetics, and several approaches to chemical bonding are discussed, as are the periodic properties of the elements and topics in descriptive inorganic chemistry. Lectures, conferences, and three hours of laboratory a week.

Prerequisite: **Chemistry 101** or consent of the instructor.

210. Quantitative Analysis. Fall 1988. MS. STEMMLER.

Methods of separating and quantifying inorganic and organic compounds using volumetric, spectrophotometric, electrometric, and gravimetric techniques will be covered. Fundamentals of gas and liquid chromatography and the statistical analysis of data will be addressed. Lectures and four hours of laboratory work a week.

Prerequisite: **Chemistry 102.**

225. Elementary Organic Chemistry. Every fall. MR. MAYO.

An introduction to the chemistry of the compounds of carbon. The foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 102.**

226. Organic Chemistry. Every spring. MR. TRUMPER.

A continuation of the study of the compounds of carbon. **Chemistry 225** and **226** cover the material of the usual course in organic chemistry and form a foundation for further work in organic chemistry and biochemistry. Lectures, conference, and four hours of laboratory work a week.

Prerequisite: **Chemistry 225.**

230-239. Intermediate Topics in Chemistry.

232. Chemical Ecology. Fall 1988. MR. MAYO.

Topics discussed are chemical interactions between plants and insects, chemical communications within animal species, chemical defense against predation in arthropods, chemical ecology of fish and other marine systems, and, if time permits, nonhormonal interaction of terpenoid compounds in ecology.

234. Survey of Materials Science. Spring 1989. MR. DOAN.

The growing field of materials research affects all aspects of science these days. This course is designed to provide a broad survey of many of these areas, with special attention paid to some of the more recent discoveries. Topics for lecture/discussion taken from the following: polymers and composite materials, molecular and ionic solids, surface science, and catalysis. Because this is an extremely wide field of interest, each student is required to give short, supplementary reports to the class on areas not covered in lecture.

Prerequisites: One year each of chemistry, physics, and math, or consent of instructor.

240. Inorganic Chemistry. Spring 1989. MR. NAGLE.

An introductory survey of the chemistry of the elements. Chemical bonding and its relationship to the properties and reactivities of coordination compounds, organometallic compounds, and covalent and ionic solids will be emphasized. Some coverage of inorganic solution chemistry will be included also. Lectures and four hours of laboratory work a week.

Prerequisites: **Chemistry 102** and **226. Chemistry 226** may be taken concurrently.

251. Physical Chemistry I. Every fall. MR. DOAN.

Thermodynamics and its application to chemical changes and equilibria that occur in the gaseous, solid, and liquid states. Macroscopic behavior of chemical systems is related to molecular properties by means of the kinetic theory of gases and statistical mechanics. Also included is the study of chemical kinetics.

Prerequisite: **Chemistry 102, Physics 103, Mathematics 171**, or consent of the instructor. **Mathematics 181** recommended.

252. Physical Chemistry II. Every spring. MR. CHRISTENSEN.

Development and principles of quantum mechanics with applications to atomic structure, chemical bonding, chemical reactivity, and molecular spectroscopy.

Prerequisite: **Chemistry 251** or consent of the instructor. **Mathematics 181** recommended.

254. Physical Chemistry Laboratory. Every spring. MR. DOAN.

Experiments on thermodynamics, kinetics, and spectroscopy. One to two hours of lecture and three to six hours of laboratory per week.

Prerequisite: **Chemistry 251, 252** (generally taken concurrently).

261. Biochemistry I. Every fall. MR. HOWLAND.

See **Biology 261**, page 118.

262. Biochemistry II. Every spring. MR. PAGE.

An introduction to metabolism. Topics will include pathways in living cells by which important biological molecules are synthesized, and the bioorganic chemistry of nucleic acid and protein synthesis.

Prerequisite: **Chemistry 261**.

[270. Molecular Structure Determination in Organic Chemistry.]**310. Advanced Inorganic Chemistry.** Fall 1988. MR. NAGLE.

An in-depth look at topics in coordination chemistry, organo-metallic chemistry, bioinorganic chemistry, and solid state inorganic chemistry.

Prerequisites: **Chemistry 240** and **252**, or consent of the instructor.

320. Advanced Organic Chemistry. Spring 1989. MR. TRUMPER.

The study of the physical organic chemistry of synthetic organic reactions. Topics discussed include: stereochemistry, conformational analysis, molecular orbital theory, carbanion chemistry, cycloaddition reactions, and concerted intramolecular rearrangements. Applications to the synthesis of natural products and ethical pharmaceuticals will be emphasized. Students will learn to read articles of interest in the current chemical literature.

Prerequisite: **Chemistry 226**.

330-339. Advanced Topics in Chemistry.**330. Topics in Bioorganic Chemistry.** Fall 1988. MR. PAGE.

Structures and mechanisms in bioorganic chemistry. Emphasis on understanding the mechanistic implications of molecular structure and developing mechanistic theory from experimental data. Prerequisite: **Chemistry 262**.

331. Atmospheric Chemistry. Spring 1989. MR. BUTCHER.

An introduction to the chemical and physical processes central to a consideration of the global atmospheric environment. Basic principles applied to an examination of the atmospheric cycles of trace gases and particles and to several problems of contemporary interest including acid rain, carbon dioxide and other greenhouse gases, and nuclear winter.

Prerequisite: **Chemistry 251** or consent of the instructor.

[332. Inorganic Seminar.]**340. Instrumental Analysis.** Spring 1989. Ms. STEMMLER

Theoretical and practical aspects of instrumental techniques such as nuclear magnetic resonance, infrared, Raman, x-ray fluorescence, and mass spectrometry will be covered, in conjunction with advanced chromatographic methods. Signal processing, correlation techniques, and computer interfacing will be explored. Lectures and four hours of laboratory work a week.

Prerequisite: **Chemistry 210** and **254** or consent of instructor.

350. Photochemistry: Light, Chemistry, and Life. Fall 1988. Mr. CHRISTENSEN.

Considers descriptions of light and energy levels in molecules and how light and molecules interact. Looks at several examples of organic photochemistry, e.g., Woodward-Hoffman and Fukui models for reactivity in pericyclic reactions, atmospheric photochemistry, photochemical isotope enrichment, and applications of energy transfer. Topics in photobiology, namely photosynthesis, artificial photosynthesis, vision, and the biological effects of ultraviolet radiation also are discussed.

Prerequisites: **Chemistry 252** or consent of instructor.

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.

For students intending to conduct a laboratory research project, either **Chemistry 254**, **Biology 211**, or **Biology 212** is required.

Classics

PROFESSOR AMBROSE, *Chair (Fall 1988)*; ASSOCIATE PROFESSOR BOYD, *Chair (Spring 1989)*; ASSISTANT PROFESSORS PRATT AND SMITH

The Department of Classics offers two major programs, one with a focus on language and literature (Classics), and one with a focus on classical archaeology (Classics/Archaeology). Students pursuing either major are encouraged to study not only the languages and literatures but also the physical monuments of Greece and Rome. This approach is reflected in the requirements for the two major programs: for each, requirements in Greek and/or Latin and in classical archaeology must be fulfilled.

Classics. The Classics program is arranged to accommodate both those students who have studied no classical languages and those who have had extensive training in Latin and Greek. The objective of classics courses is to study the ancient languages and literatures in the original. By their very nature, these courses involve students in the politics, history, and philoso-

phies of antiquity. Advanced language courses focus on the analysis of textual material and on literary criticism.

Requirements for the Major in Classics: The major in classics consists of nine courses. At least six of the nine courses are to be chosen from offerings in Greek and Latin and should include at least two courses in Greek or Latin at the 300 level; one of the remaining courses should be **Archaeology 101** or **102**. Students concentrating in one of the languages are encouraged to take at least two courses in the other. **Classics 51** and **52** may not normally be counted towards the major.

Classics/Archaeology. Within the broader context of classical studies, the Classics/Archaeology program pays special attention to the physical remains of classical antiquity. Students studying classical archaeology should develop an understanding of how archaeological evidence can contribute to our knowledge of the past, and of how archaeological study interacts with such related disciplines as philology, history, and art history. In particular, they should acquire an appreciation for the unique balance of written and physical sources that makes classical archaeology a central part of classical studies.

Requirements for the Major in Classics/Archaeology: The major in classics/archaeology consists of ten courses. At least five of the ten courses are to be chosen from offerings in archaeology, and should include **Archaeology 101** and **102**; and at least one archaeology course at the 300 level. At least four of the remaining courses are to be chosen from offerings in Greek and Latin, and should include at least one at the 300 level. **Classics 51** and **52** may not normally be counted towards the major.

Interdisciplinary Major: The department participates in an interdisciplinary program in archaeology and art history. See page 179.

Requirements for the Minor: Students may choose a minor in one of four areas: Greek, Latin, classics, or archaeology. The minor in Greek consists of four courses in the Greek language. The minor in Latin consists of four courses in the Latin language. The minor in classics consists of four courses in Greek and Latin, including **Greek 204** or **Latin 205**. The minor in archaeology consists of four archaeology courses, including either **Archaeology 101** or **102**, and at least one course at the 300 level.

Classics and Archaeology at Bowdoin and elsewhere. Archaeology classes regularly use the outstanding collection of ancient art in the Bowdoin College Art Museum: of special note are the exceptionally fine holdings in Greek painted pottery, and the very full and continuous survey of Greek and Roman coins. In addition, there are numerous opportunities for study or work abroad. Bowdoin is a participating member of the Intercollegiate Center for Classical Studies in Rome, where students in both major programs can study in the junior year (see p. 89). It is also possible to receive course credit for field experience on excavations. Interested students should consult members of the department for further information.

Students contemplating graduate study in classics or classical archaeology are advised to begin the study of at least one modern language in college, as most graduate programs require competence in French and German as well as Latin and Greek.

Archaeology

Archaeology 101 and **102** are offered in alternate years. Courses to be offered in archaeology after the spring semester of 1989 were under review by the faculty at the time the catalog went to press. Students interested in obtaining further information about archaeology courses should consult members of the department.

101. Introduction to Classical Archaeology. Fall 1989.

A chronological survey of the archaeology of Greece, from the Neolithic to Alexander the Great. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes architecture, sculpture, vase painting, and the "minor arts."

102. Introduction to Classical Archaeology. Fall 1988.

The archaeology of the Hellenistic kingdoms and Rome, from Alexander the Great to Constantine. First attempts to define characteristic features of Hellenistic culture, then traces the emergence of a distinctively Roman civilization from both this background, and from native Italic traditions. Considers the nature of archaeological evidence, and the relationship of classical archaeology to other disciplines such as art history, history, and the classics. Material studied includes mural painting, architecture, sculpture, and the "minor arts."

201. Athens, the "School of Hellas." Spring 1989.

Focuses on Athens as the leading intellectual and artistic center of Greece from its "Golden Age" under Pericles to the death of Socrates. If Athens was, as Pericles is supposed to have claimed, "the school of Hellas," then what did it teach? Looks at Athens' cultural achievement against the historical background of the Athenian "empire," and the debilitating Peloponnesian Wars. Material examined will include the principle archaeological monuments of fifth century Athens, and selected original literature (drama, history).

(Same as **Classics 201**.)

302. Greek and Roman Numismatics. Spring 1989.

Surveys Greek and Roman coinage by examining a series of problems ranging chronologically from the origins of coinage in the seventh century B.C. to the late Roman empire. How did uses of coinage in Greek and Roman society differ from modern uses? How does numis-

matic evidence inform us about ancient political and social, as well as economic, history? One class per week will be held in the College Art Museum, and course assignments will be based on coins in the collection.

[307. The Birth of Greek Art.]

While there are not prerequisites for upper level archaeology courses, it is normally recommended that students first take **Archaeology 101** or **Archaeology 102**.

[391, 392. Special Topics.]

Classics

51. Classical Mythology. Spring 1990. Ms. BOYD.

Focuses on the mythology of the Greeks and includes an intensive study of the myths themselves. Other subjects considered are recurrent patterns in Greek myths, the application of modern sociological and psychological theories to the study of myth, ancient creation myths, and the relation of mythology to religion. Concludes with an examination of the use of myths in ancient literature. Course limited to seventy-five students.

52. Greek Literature in Translation. Spring 1991. MR. AMBROSE.

An introduction to the important works of Greek literature in English translation. The objective of the course is not only to provide an understanding and appreciation of the literary achievements of the Greeks, but also to convey a sense of the meaning and spirit of Greek literature in the context of Greek history and culture. Enrollment limited to one hundred.

53. Latin Literature in Translation. Spring 1989. Ms. PRATT.

An introduction to the Latin literature in English translation. Examines influential works of Latin literature and the history and culture of the Roman society that produced them. The course aims foremost at an appreciation of the individual works considered, but will also discuss such general subjects as the relationship between history and literature, ancient reflection on Roman imperialism, and women in Roman society and art. Readings include Vergil's *Aeneid*, Petronius' *Satyricon*, selections from Catullus, Cicero, Ovid, Roman drama, satire and history. Enrollment limited to sixty.

Note: This course is to be offered one time only.

201. Athens, the "School of Hellas." Spring 1989.

(Same as **Archaeology 201**.)

- [202. **Rome of the Caesars.** *Pending faculty approval.*]
 [203. **Greek Religion.** *Pending faculty approval.*]
 [301. **Greek Painting and Mosaic.** *Pending faculty approval.*]
 [303. **Criticism and Aesthetic Theory in Antiquity.** *Pending faculty approval.*]
 311. **Women in Antiquity.** Fall 1988. Ms. BOYD.

This seminar examines the experiences of Greek and Roman women as represented in both literary and documentary sources. Topics to be covered include the portrayal of women in ancient myth and literature, women's role in state and private religious activities, women in the elite, the legal and social status of women, family and household organization, relations between men and women, and scientific knowledge and folklore about women. These and other topics will be followed chronologically through the two cultures, with special emphasis given to the coincidences and conflicts between literary images of women and the realities recoverable through documentary evidence. Students will write several essays and a research paper intended to evaluate the nature of the ancient sources on women.

Greek

101. **Elementary Greek.** Every fall. MR. SMITH.

A thorough presentation of the elements of accidence and syntax based, insofar as possible, on unaltered passages of classical Greek.

102. **Continuation of Course 101.** Every spring. MR. SMITH.

In the latter half of the term a work of historical or philosophical prose is read.

203. **Plato.** Every fall. Ms. PRATT.

204. **Homer.** Every spring. Ms. BOYD.

One of the following advanced Greek courses will be offered each semester:

301. **Homer: Odyssey.** Fall 1989. MR. AMBROSE.

- [302. **Didactic Poetry.**]

303. **Lyric and Elegiac Poetry.** Fall 1988. MR. AMBROSE.

304. **The Historians.** Spring 1990. MR. SMITH.

- [305. **Comedy.**]

- [306. Aeschylus.]
- [307. Sophocles.]
- [308. Euripides.]
- [309. Plato and Aristotle.]
- [310. Oratory.]
- 311. **The Myth of Prometheus.** Spring 1989. MS. PRATT.
- [312. **The Alexandrian Age.**]
- [391, 392. **Special Topics.**]

Latin

- 101. **Elementary Latin.** Every fall. MR. AMBROSE.
A thorough presentation of the elements of Latin grammar. Emphasis placed on achieving a reading proficiency.
- 102. **Continuation of Course 101.** Every spring. MS. PRATT.
In the latter half of the term, readings are based on unaltered passages of classical Latin.
- 203. **Cicero.** Every fall. MS. PRATT.
A rapid review of grammar followed by readings from Cicero and a brief introduction to Latin poetry.
Prerequisite: **Latin 101** or two years of secondary school Latin.
- 204. **Vergil. The Aeneid.** Every spring. MS. BOYD.
Prerequisite: **Latin 203** or equivalent.
- 205. **Horace and Catullus.** Every fall. MR. AMBROSE.
Prerequisite: **Latin 204** or equivalent.

One of the following advanced Latin courses will be offered each semester:

- [301. **Livy.**]
- 302. **Ovid: Metamorphoses.** Fall 1988. MS. BOYD.
- [303. **Elegiac Poetry.**]
- [304. **Cicero.**]
- [305. **Vergil: Aeneid.**]
- [306. **Roman Novel.**]
- [307. **Satire.**]

308. **Tacitus.** Spring 1990. Ms. BOYD.

[309. **Age of Nero.**]

[310. **Augustan Poetry Survey.**]

[311. **Lucretius.**]

312. **Roman Comedy.** Fall 1989. Ms. BOYD.

391, 392. **Special Topics.**

Spring 1989. **Catilinarian Conspiracy.** Ms. BOYD.

290. **Intermediate Independent Study.** THE DEPARTMENT.

400. **Advanced Independent Study and Honors.** THE DEPARTMENT.

Computer Science and Information Studies

PROFESSOR TUCKER, *Chair*; ASSISTANT PROFESSORS GARNICK AND WERNER

Computer science, in general, is the study of problem decomposition and solution description. In particular, it involves the study of algorithms and data structures, including their formal properties, their implementation on real and abstract machines, their programming languages, and their applications in other academic disciplines and society at large. Computer science is a scientific discipline, in the sense that it has an essential laboratory dimension. Students use the laboratory not only to develop programs but also to test hypotheses about the properties of algorithms, data structures, and computers. Computer science is simultaneously a mathematical discipline, sharing significant subject matter and methods with mathematics.

The computer science curriculum at Bowdoin is designed to introduce students to the discipline in depth, while paying attention also to its interdisciplinary ties in the sciences and the humanities. Students may take an introductory computer science course (50 or 101) to complement work in their major field. More depth in the discipline may be obtained by minoring in computer science. This option provides a foundation for graduate study in computer science, on the one hand, or for various other computer-related professional experiences, on the other.

Requirements for the Minor in Computer Science and Information Studies: The minor consists of the five courses: **Computer Science and Information Studies 101, 102, 220, 231, and Mathematics 228.**

50. **Computer Literacy.** Fall 1988. THE DEPARTMENT.

An introduction to principles of programming, computer organization, and applications for students from all disciplines. This introduction will be motivated by examples of computing in the sciences, the

social sciences, and the humanities. Additional readings will explore various contemporary topics surrounding the use of computers in modern society. Students will be expected to complete a term project that is appropriate to their principal field of study. That project may either involve programming, using a software package, or writing a paper that addresses a contemporary issue in computing.

101. Introduction to Computer Science I. Every semester. THE DEPARTMENT.

A first course in computer science. Emphasis is placed upon problem specification and algorithm design, disciplined style and documentation, control structures, recursion, and procedural abstraction. A block structured programming language and a contemporary laboratory environment is used to reinforce principles introduced in the lectures. A survey of the major areas of the field of computer science provides a foundation for further study.

102. Introduction to Computer Science II. Spring 1989. MR. TUCKER.

An introduction to principles of data abstraction, complexity of algorithms, and verification of algorithms, which are central subjects in the field of computer science. Particular data types include lists, stacks, queues, strings, binary trees, and files. Linked lists, arrays, and other implementation strategies are evaluated. Laboratory experiments complement the lectures, and team projects will be assigned.

Prerequisites: **Computer Science 101** and **Mathematics 228**, or consent of the instructor.

220. Computer Organization. Spring 1989. MR. GARNICK.

Computer systems are organized as multiple layers. Each layer provides a more sophisticated abstraction than the layer upon which it is built. At the top layer, application programs such as word processors define mappings from commands to responses. At the bottom layer, the mappings are implemented as changes in voltages. This course examines techniques and issues involved in designing systems at the digital logic, microprogramming, and assembly language layers of computer organization. Laboratory work is designed to familiarize students with a particular machine through assembly language programming.

Prerequisite: **Computer Science 101**.

231. Data Structures and Algorithms. Fall 1988. MR. GARNICK.

The study of data structures concerns programming for conceptual expediency; the study of algorithms concerns programming for computational expediency. This course covers techniques in these two areas, and examines their interplay. Topics include abstract data types,

dynamic list structures, trees, graphs, sorting, dynamic programming, NP-completeness, and parallel algorithms.

Prerequisite: **Computer Science 102** or permission of instructor.

240. Topics in Set Theory and the Foundations of Mathematics.

[250. Principles of Programming Languages.]

[260. Compiler Construction.]

[270. Introduction to Artificial Intelligence.]

275. Topics. Spring 1989. MR. TUCKER.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Economics

PROFESSOR VAIL, *Chair*; PROFESSOR FREEMAN; RESEARCH PROFESSOR SHIPMAN; ASSOCIATE PROFESSORS GOLDSTEIN AND JONES; ASSISTANT PROFESSORS CONNELLY, DEAN, DECOSTER, FITZGERALD, MALONEY, AND STRANGE.

The Major in Economics is designed for students who wish to obtain a systematic introduction to the basic theoretical and empirical techniques of economics. It provides an opportunity to study economics as a social science with a core of theory, to study the process of drawing inferences from bodies of data and testing hypotheses against observation, and to study the application of economic theory to particular social problems. Such problems include economic development, the functioning of economic institutions (e.g., corporations, government agencies, labor unions), and current policy issues (e.g., poverty, pollution, energy, and monopoly). The major is a useful preparation for graduate study in economics, law, business, or public administration.

The major consists of **Economics 101** and **102**, three "core" courses (**Economics 255, 256, and 257**), one advanced topics course numbered in the 300s, and two additional courses in economics numbered 200 or above. **Economics 101** is a prerequisite for **Economics 102**, and both are prerequisites for most other economics courses. Prospective majors are encouraged to take at least one core course by the end of the sophomore year and all three core courses should normally be completed by the end of the junior year. Advanced topics courses normally have some combination of **Economics 255, 256, and 257** as prerequisites.

Qualified students may undertake self-designed, interdisciplinary major programs or joint majors between economics and related fields of social analysis.

Interdisciplinary Major: The department participates in an interdisciplinary major in mathematics and economics. See page 181.

Requirements for the Minor in Economics: The minor consists of **Economics 101** and **102**; **255** or **256**; and two electives numbered 200 or above. Core courses, **Economics 255**, **256**, and **257** cannot be used as electives for the minor.

10. Freshman Seminar: Poverty and Discrimination. Fall 1988. MR. MALONEY.

The causes of poverty and discrimination are investigated. Evaluation of policies designed to combat these problems and discussion of alternative policies, proposed but not enacted. The course looks specifically at the impact of economic growth and increased social welfare expenditures on poverty, and the role of affirmative action in reducing discrimination. Conservative, liberal, and radical perspectives are explored.

101. Principles of Microeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions with special emphasis on the allocation of resources through markets. The theory of demand, supply, cost, and market structure is developed. It is applied to problems in antitrust policy, environmental quality, energy, education, health, the role of the corporation in society, income distribution, and poverty. Students desiring a comprehensive introduction to economic reasoning should take both **Economics 101** and **102**.

102. Principles of Macroeconomics. Every semester. THE DEPARTMENT.

An introduction to economic analysis and institutions with special emphasis on determinants of the level of national income, prices, and employment. Current problems of inflation and unemployment are explored with the aid of such analysis, and attention is given to the sources and consequences of economic growth. Alternative views of the effectiveness of fiscal, monetary, and other governmental policies are analyzed.

Prerequisite: **Economics 101**.

207. The International Economy. Fall 1988. MR. JONES.

An analysis of the factors influencing the direction and composition of trade flows among nations, balance of payments equilibrium and adjustment mechanisms, and the international monetary system. Basic elements of international economic theory are applied to current issues such as tariff policy, capital flows and international investment, reform of the international monetary system, and the international competitiveness of the American economy.

Prerequisite: **Economics 101** and **102**.

[208. American Economic History and Development.]

- 209. Economics of Money, Banking, and Finance.** Fall 1988 and Spring 1989. MR. DECOSTER.

The general principles and institutions of money, banking, and financial markets as they relate to the performance of the economic system. Current problems concerning financial institutions, the flow of funds into investment, the Federal Reserve System, inflation, and the use of monetary and financial controls are considered.

Prerequisite: **Economics 101 and 102.**

- 210. Economics of the Public Sector.** Fall 1988. MR. FITZGERALD.

The economic role of government. Deals with theoretical and policy issues of government expenditures and revenues in meeting such social goals as allocative efficiency and income redistribution. Issues on the current political agenda are given special attention.

Prerequisite: **Economics 101 and 102.**

- 212. Labor and Human Resource Economics.** Fall 1989. MR. MALONEY.

Theories of labor market structure and performance. Manpower and human resources policies. Topics are covered from an institutional as well as an analytical point of view.

Prerequisite: **Economics 101 and 102.**

[213. History of Economic Thought.]

- †**214. Comparative Political Economy.** Fall 1989. MR. VAIL.

The course begins with an investigation of criteria for defining and evaluating the performance of different modes of production. A historical, class analytic framework for comparative study is set out. The core of the course consists of studies of several paths to socialism including the Soviet Union, China, Hungary, and Yugoslavia. Concludes with a study of Sweden's "middle way" and its implications for late capitalism.

Prerequisite: **Economics 101 and 102, or consent of the instructor.**

[215. Public Enterprise and Regulation.]

- 216. Industrial Organization.** Fall 1988. MR. STRANGE.

Analysis of the causes and consequences of market structure. Among the topics covered are antitrust law, barriers to entry, contestable markets, mergers, oligopoly theory, product choice, and technological innovation.

Prerequisite: **Economics 101 and 102.**

- 217. The Economics of Population.** Spring 1990. MS. CONNELLY.

A study of the interaction of economic variables and population

processes, especially fertility, mortality, and migration. The first half of the course focuses on economic determinants of population, and the second half focuses on the consequences of population growth on the economy.

Prerequisite: **Economics 101 and 102.**

218. Economics of Resources and Environmental Quality. Spring 1990. MR. FREEMAN.

The economic dimensions of environmental quality and resource management problems faced by the United States and the world. The relationships among population, production, and pollution; the role of market failure in explaining the existence of pollution; evaluation of alternative strategies for pollution control and environmental management; the adequacy of natural resource stocks to meet the future demands of the United States and the world.

Prerequisite: **Economics 101.**

†219. Underdevelopment and Strategies for Development in Poor Countries. Fall 1988. MR. VAIL.

The major economic features of underdevelopment are investigated with stress on economic dualism and the interrelated problems of poverty, inequality, urban bias, and unemployment. The assessment of development strategies stresses key policy choices, such as export promotion versus import substitution, agriculture versus industry, and capital versus labor-intensive technologies. Topics include the Third World debt crisis, African famines, and rapid industrialization in East Asia.

Prerequisite: **Economics 101 and 102** or consent of the instructor.

221. Marxian Political Economy. Spring 1989. MR. GOLDSTEIN.

An introduction to the philosophical and methodological foundations of Marxian theory and the Marxian analysis of capitalistic economic development. After a brief introduction to the Marxian method, the basic analytical concepts of Marx's economic theory are developed from a reading of Volume I of *Capital*. Subsequently, the Marxian framework is applied to analyze the modern capitalist economy with emphasis on the secular and cyclical instability of the economy and appropriate policy prescriptions.

Prerequisites: **Economics 101 and 102.**

222. International Trade and Economic Development. Spring 1989. MS. DEAN.

International economic problems and policy issues of developing countries. Begins with an examination of an LDC's choice of trade strategy and its impact on its development. Subsequently examines

issues raised by the call for a "new international economic order," including access to industrial country markets, regional integration, the debt crisis, commodity agreements, and foreign aid.

Prerequisites: **Economics 101** and **102**.

[230-239. Contemporary Problems.]

255. Microeconomics. Fall 1989. MR. MALONEY. Spring 1989. MS. DEAN.

An advanced study of contemporary microeconomic theory. Analysis of the theory of resource allocation and distribution with major emphasis on systems of markets and prices as a social mechanism for making resource allocation decisions. Topics include the theory of individual choice and demand, theory of the firm, market equilibrium under competition and monopoly, general equilibrium theory, and welfare economics. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102**.

256. Macroeconomics. Fall 1988. MR. DECOSTER. Spring 1989. MR. JONES.

An advanced study of contemporary national income, employment, and inflation theory. Consumption, investment, government receipts, government expenditures, money, and interest rates are examined for their determinants, interrelationships, and role in determining the level of aggregate economic activity. Policy implications are drawn from the analysis. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102**.

257. Economic Statistics. Fall 1988. MR. GOLDSTEIN. Spring 1989. MR. FITZGERALD.

An introduction to the data and statistical methods used in economics. A review of the systems that generate economic data and the accuracy of such data is followed by an examination of the statistical methods used in testing the hypotheses of economic theory, both micro- and macro-. Probability, random variables and their distributions, methods of estimating parameters, hypothesis testing, regression, and correlation are covered. The application of multiple regression to economic problems is stressed. Enrollment limited to forty.

Prerequisite: **Economics 101** and **102**.

Courses numbered above 300 are advanced courses in economic analysis intended primarily for senior majors. Enrollments in these courses are limited to 18 students in each unless stated otherwise.

301. The Economics of the Family. Fall 1991. MS. CONNELLY.

Microeconomic analysis of the family, its roles, and its related institutions. Topics will include marriage, fertility, labor supply, human capi-

tal formation, savings, consumption, and bequests, and the family as an economic organization.

Prerequisite: **Economics 255** and **257** or consent of the instructor.

[302. **Business Cycles.**]

[307. **Advanced International Finance.**]

308. **Advanced International Trade.** Fall 1988. MS. DEAN.

Study of theoretical and applied international trade. Theoretical models are developed to explain the pattern of trade and the gains from trade. This theory is then applied to issues in commercial policy, such as free trade *vs.* protection, regional integration, the GATT and trade liberalization, foreign direct investment, and the changing comparative advantage of the United States.

Prerequisite: **Economics 255** or consent of the instructor.

310. **Advanced Public Economics.** Fall 1989. MR. FITZGERALD.

A survey of theoretical and empirical evaluations of government activities, considering both efficiency and equity aspects. Topics include public choice, income redistribution, benefit-cost analysis, analysis of selected government expenditure programs (including social security), incidence and behavioral effects of taxation, and tax reform. Current public policy issues are emphasized.

Prerequisite: **Economics 255** and **257** or consent of the instructor. Not open to those who have taken **Economics 210**.

312. **Advanced Analysis of Labor Market Policies.** Spring 1989. MR. MALONEY.

An analysis of labor market issues, such as unemployment, discrimination, home production, unionization, and the effects of public assistance on labor supply and childbearing. The focus of the course is on public policy analysis—what are the intended and unintended consequences of government policy? The course does not cover industrial relations topics such as personnel management. Modern labor economics relaxes many of the assumptions in intermediate theory courses (perfect information, lack of transactions costs, instantaneous adjustment of wages, etc.) while retaining a rigorous microeconomic approach.

Prerequisites: **Economics 255** and **257** or consent of the instructor. Not open to those who have taken **Economics 212**.

316. **Econometrics.** Fall 1988. MR. GOLDSTEIN.

A study of the mathematical formulation of economic models and the statistical methods of testing them. A detailed examination of the general linear regression model, its assumptions, and its extensions.

Applications to both micro- and macro-economics are considered. Though most of the course deals with single equation models, an introduction to the estimation of systems of equations is included. An empirical research paper is required. Limited to twenty-five students.

Prerequisite: **Economics 257** or **Mathematics 265**, and **Mathematics 161**, or consent of the instructor.

318. Environmental and Resource Economics. Fall 1989. MR. FREEMAN.

Analysis of externalities and market failure; models of optimum control of pollution and efficient management of renewable and non-renewable natural resources such as fisheries, forests, and minerals; benefit-cost analysis, risk-benefit assessment, and the techniques for measuring benefits and costs of policies.

Prerequisite: **Economics 255** and **257** or consent of the instructor. Not open to those who have taken **Economics 218**.

320. Economics, Technology and Progress. Spring 1989. MR. VAIL

The course investigates economic and other forces influencing the pace and direction of technical change, as well as the implications of new technology for human wellbeing and ecological sustainability. Theoretical viewpoints, from Adam Smith to neoclassical "induced innovation", are analysed, with emphasis on Marxian and institutional interpretations. Empirical cases include agricultural mechanization, "scientific management," biotechnology, robotization and technology transfer to the Third World.

Prerequisites: **Economics 255** and **257**.

355. Topics in Advanced Microeconomic Theory. Spring 1988. MR. STRANGE

The economics of uncertainty. Mathematical methods are employed to study insurance markets, agency relationships, signalling, screening, search, portfolio theory, and games of incomplete and imperfect information.

Prerequisites: **Economics 255**, **Economics 257**, and **Mathematics 181** or instructor's consent.

400. Independent Study and Honors. THE DEPARTMENT.

Education

ASSISTANT PROFESSOR MARTIN, *Chair*; ANN S. PIERSON, *Director of Programs in Teaching and Coordinator of Volunteer Services*

There is no Major in Education.

Requirements for the Minor in Education: The minor in education requires four courses, one of which may be an independent study.

Requirements for Certification to Teach in Public Secondary Schools: (1) a major in a teaching field; (2) two courses in psychology; (3) four courses in education (one 100-level course; one 200-level course, or an independent study; and **Education 301** and **302**; on occasion, other academic departments offer courses emphasizing education which may be approved for certification purposes by the chairperson of the Department of Education; (4) a semester of volunteer experience with youth.

On page 92 there is a further discussion of careers in teaching.

101. Education in the Twentieth Century. Fall 1988. Ms. MARTIN.

The study of the past three decades as the culmination of expansion in American education and its increasingly complex and contradictory purposes. The role of schools and colleges in society's pursuit of equity and excellence is explored.

[102. History of American Education.]

201. Schools and Communities. Spring 1989. Ms. MARTIN.

The modern secondary school as a complex reflection of local community characteristics and larger social purposes. Students undertake field work on questions of community and professional participation and interdependence in the educational ecosystem of the community.

[202. Schooling, Public and Private.]

[250. Law and Education.]

301. Teaching. Fall 1988. Ms. MARTIN.

A study of what takes place in classrooms: the methods and purposes of teachers, the response of students, and the organizational context. Regular observations in a variety of classrooms are required.

Prerequisite: Two education courses or consent of the instructor.

302. Student Teaching. Spring 1988. Ms. MARTIN.

This final course in the Student Teaching sequence requires considerable commitments of time and responsibilities in a local school classroom. Required of all students who want public school certification, it is also open to those with other serious interests in teaching. In addition to daily work in the school, weekly class meetings and writing are required. Grades are awarded on a credit/fail basis only.

Prerequisite: For seniors, with the permission of the instructor, who have completed **Education 301** and have had experience volunteering in schools.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors.

English

ASSOCIATE PROFESSOR WATTERSON, *Chair*; PROFESSORS COURSEN, GREASON, KASTER, AND REDWINE; ASSOCIATE PROFESSORS BURROUGHS, DIEHL, AND LITVAK; ASSISTANT PROFESSORS COLLINGS, GOODRIDGE, RAABE, AND REIZBAUM; LECTURER PEMBERTON; INSTRUCTOR SANDONA

Requirements for the Major in English and American Literature:

The major consists of ten courses. At least one semester unit is required from each of four groups: (a) **English 200, 201, or 202**; (b) **210 or 211**; (c) **220, 221, or 222**; (d) **230, 231, 240, or 241**. Six additional units may be selected from the foregoing and/or **English 10-29** (freshman seminars, not more than two); **101-103**; **250-281**; **300-399**; **290-291** (independent study); **400-401** (advanced independent study). *Regular courses (English 50-99) and independent studies (English 294-297; English 404-407) in film and communication do not count toward the major.* Students who intend to major in English should take a minimum of three courses in the department before declaring the major.

Majors who are candidates for honors must write an honors essay and take comprehensive examinations, both oral and written, during the senior year. Exceptions to the major requirements may be arranged by the department to encourage and accommodate special individual programs such as interdisciplinary studies in English and english history (see pages 180-181).

Requirements for the Minor in English and American Literature:

At least five of the above courses, excluding all courses in film and communication.

English 10-29

Freshman Seminars in English Composition and Literature

Open to freshmen. The freshman English courses are numbered 10-19 in the fall, 20-29 in the spring. Usually there are not enough openings in the fall for all freshmen who want an English seminar. Freshmen who cannot get into a seminar in the fall are given priority in the spring. The main purpose of the freshman seminars (no matter what the topic or reading list) is to give freshmen extensive practice in *reading* and *writing* analytically. Each section is normally limited to fifteen students. Discussion, outside reading, frequent papers, and individual conferences on writing problems.

Fall 1988

10. Shakespeare and Television. Fall 1988. MR. COURSEN.

An examination of how Shakespeare's dramatic scripts translate to television and film. Intensive reading of the plays, several papers, and a viewing of twelve to fifteen productions are required.

11. Satire. Fall 1988. MR. REDWINE.

An examination of some different methods and objects of satire in works of Sir Thomas More, Shakespeare, Jonson, Voltaire, Swift, Butler, Twain, Huxley, and Orwell.

12. "The Uses of Nostalgia": Studies in the Literary Pastoral. Fall 1988. MR. WATTERSON.

Readings in Theocritus, Vergil, Longus, Spenser, Shakespeare, Herrick, Milton, Marvell, Wordsworth, Hardy, D. H. Lawrence, Frost, and others. Topics for consideration include the myth of the Golden Age, the myth of the Fall, the town/country dialectic, the nature of primitivism, and the paradoxical mediation of nature by art.

13. Realism and Sensationalism. Fall 1988. MR. LITVAK.

A study of these two apparently opposite tendencies in late eighteenth- and nineteenth-century fiction. Texts by Radcliffe, Austen, Charlotte Brontë, Dickens, Collins, Braddon, and Stoker.

14. The Narrative Voice. Fall 1988. MS. REIZBAUM.

An examination of narrative voice through different modes and combinations of modes (epic, picaresque, gothic, etc.) or what it means to tell a story. Authors include Homer, Dickens, Boccaccio, Mary Shelley, Lochhead, Twain, Lorrie Moore, Olsen, and Borges.

15. Modern Short Fiction. Fall 1988. MS. GOODRIDGE.

Close readings of short works by Joyce, Kafka, Mansfield, O'Connor, Porter, and Kundera.

16. Gender and Sexuality in Romantic Literature. Fall 1988. MR. COLLINGS.

An examination of perceptions of gender, desire, seduction, marriage, adultery, and pregnancy in Blake, Austen, Wordsworth, Coleridge, Mary Shelley, Keats, and Byron.

17. Arthurian Legend. Fall 1988. MS. RAABE.

We will explore the reasons for Arthur's enduring popularity in the Middle Ages, his fall from favor after the Renaissance, and his revival in the 19th and 20th centuries on the English and American page, stage, and screen. Emphasis will be on the variety of ways in which succeeding authors and generations have used Arthur and his court to consolidate, explore, or question prevailing cultural and political ideals. Readings include Geoffrey of Monmouth's *Historia*, the *Lancelot* of Chrétien de Troyes, *The Quest For the Holy Grail*, *Sir Gawain and the Green Knight*, and the Arthurian works of Malory, Tennyson, White, and Bradley.

18. American Women Writers. Fall 1988. MS. DIEHL.

An introduction to the works of major nineteenth- and twentieth-century women writers, including Sarah Orne Jewett, Charlotte Perkins Gilman, Kate Chopin, Zora Neale Hurston, Flannery O'Connor, Tillie Olsen, and Grace Paley. The seminar will focus on the emergence of a female literary tradition with particular attention to the interaction of gender, subject matter, and style.

19. Homer, Dante, Milton. Fall 1988. MR. SANDONA.

An opportunity to read the major works of these three poets with care, and with attention to the three cultural moments which they represent.

Spring 1989

20. Shakespeare and Television. Spring 1989. MR. COURSEN.

An examination of how Shakespeare's dramatic scripts translate to television and film. Intensive reading of the plays, several papers, and a viewing of twelve to fifteen productions are required.

21. Drama. Spring 1989. MR. REDWINE.

Emphasis on the close reading and discussion of plays by Shakespeare, Molière, Ibsen, Shaw, Beckett, and others.

23. Literature from the "Colonies." Spring 1989. MS. REIZBAUM.

The course will introduce works in all genres written in English from countries other than England and America. We will be examining the concepts and the contexts of colonization and canonization in relation to these texts from such countries as Canada (Munro), South Africa (Fugard), Scotland (Lochhead), Ireland (McGahern), Australia, West Indies, Nigeria, and India.

24. Contemporary Ethnic American Literature. Spring 1989. MS. GOODRIDGE.

This course will focus on the fiction and memoirs of Afro-American, Asian-American, and Native American women. Writers will include Maya Angelou, Alice Walker, Paule Marshall, Toni Morrison, Jeanne Houston, Maxine Hong Kingston, Leslie Silko, and Paule Gunn Allen.

25. The Romantic Lyric. Spring 1989. MR. COLLINGS.

An introduction to English and American Romantic poetry in Blake, Wordsworth, Keats, Whitman, Dickinson, Yeats, and others.

26. Men and Women. Spring 1989. MS. RAABE.

A study of the English novel as a tool used for investigating the relationship between the sexes. Authors include Richardson, Austen, Charlotte Brontë, Eliot, Gissing, James, Lawrence, and Woolf.

27. Revenge Tragedy. Spring 1989. MR. SANDONA.

Revenge has been called "a kind of wild justice"; this seminar explores the dramatic rendering of such wildness and calls into question its consequent justice. The dramatists considered include Aeschylus, Euripides, Seneca, Kyd, Shakespeare, and Tourneur. Readings in the social sciences may bolster our speculations on the ghosts, gore, and sexual intrigue of this literary phenomenon.

**English 101 and 102
Survey Course in English Literature**

A reading course, with examinations designed to familiarize students with the main currents of English literature, from Anglo-Saxon times to the twentieth century. Limited to seventy-five students each semester with preference given in **English 101** to sophomores, juniors, and AP freshmen (in that order) and in **English 102** to students completing **English 101** and to freshmen completing a freshman seminar.

101. Every fall. Fall 1988. MR. SANDONA.

The course provides a broad introduction, from the beginnings to the end of the eighteenth century. Individual works studied in the context of major stylistic, thematic, and historical developments. Special attention given to metaphysical poetry or Augustan neoclassicism, and to consideration of genre, prosody, and mimesis. Major writers include Chaucer, Shakespeare, Donne, Milton, and Pope.

102. Every spring. Spring 1989. MR. COLLINGS.

Emphasizes major stylistic, thematic, and historical developments, from the Romantic movement at the end of the eighteenth century, through the Victorian age, and into modern British poetry. Major writers likely to be considered include Blake, Wordsworth, Shelley, Byron, Keats, Tennyson, Arnold, Browning, Hopkins, Yeats, Eliot, and Auden.

103. The Bible in Literary Focus. Spring 1989. MR. LONG.

See **Religion 50**, page 216.

Courses in Writing and Communications

50. Public Speaking. Every fall. MS. KASTER.

Theory and practice of topic selection, audience analysis, research methods, development and organization of ideas, and delivery techniques. Designed for students with little or no experience in public speaking. Enrollment limited to twenty.

Prerequisite: Consent of the instructor.

51. History, Theory, and Criticism of Film. Every fall. Fall 1988. Ms. KASTER.

An examination of the development and growth of film from its pre-filmic origins to the present. Early work of Lumiere, Melies, and Porter studied, followed by the seminal work of Griffith to establish the language of film with its ability to manipulate space and time. The work of Eisenstein studied for montage, the work of Renoir for mise-en-scene, the work of Welles for manipulation of sound. The films of a variety of auteur directors, important film genres, and national film movements studied, including auteurs Fellini, Ford, Truffaut, Bergman, Kurosawa, Hitchcock; the Western, Film Noir, and the Musical genres; and Italian Neo-Realism, the French New Wave, the New German Cinema, the Australian New Wave, the Cinema Novo of Latin America, and the New Japanese Film movements.

52. Electronic Film Production. Every spring. Spring 1989. Ms. KASTER.

The class will examine and master the elements of electronic film production including screenplay writing, storyboard construction, operation of the video camera, VCR, sound mixer, and lighting kit and post production techniques of electronic editing, multiple-track sound editing, and Chyron computer graphics. Class will be divided into four crews for the production of four films.

Prerequisite: **English 51** and consent of the instructor. Enrollment limited to 20.

[53. Topics in Communication.]

60. English Composition. Spring 1989. Ms. RAABE.

Practice in expository and critical writing, with special attention to the preparation, writing, and analysis of student essays. Ordinarily limited to students not planning to take **English 61**. Enrollment limited to fifteen.

Prerequisite: Consent of the instructor.

61. Advanced Composition. Fall 1989.

[62. Literary Composition.]

296, 297. Intermediate Independent Study in Film and Communication. Ms. KASTER.

406, 407. Advanced Independent Study in Film and Communication. Ms. KASTER.

Advanced Courses in English and American Literature

- 200. Old English.** Every other year. Fall 1989. MR. BURROUGHS.
An introduction to Old English language and literature. Readings in the original, supplemented by materials in translation.
- 201. Chaucer.** Every other year. Spring 1990. MR. BURROUGHS.
Emphasis on the *Parliament of Fowls*, *Legend of Good Women*, and *Canterbury Tales*.
- 202. Topics in Middle English Literature.**
Fall 1988. **Chaucer and the Gawain Poet.** MS. RAABE.
Emphasis on *Troilus and Criseyde*, *Sir Gawain and the Green Knight*, and *Pearl*.
- 210A. Shakespeare I.** Every fall. MR. COURSEN.
A study of Shakespeare's comedies; history plays, particularly the Second Henriad (*Richard II* to *Henry V*); and tragicomedies. The BBC-TV video productions are screened regularly as a formal component of the course.
- 210B. Shakespeare's Comedies and Romances.** Every fall. Fall 1988. MR. WATTERSON.
Examines *A Midsummer Night's Dream*, *The Merchant of Venice*, *Twelfth Night*, *As You Like It*, *The Winter's Tale*, *Cymbeline*, *Pericles*, and *The Tempest* in light of Renaissance genre theory.
- 211. Shakespeare's Tragedies and Roman Plays.** Every spring. Spring 1989. MR. WATTERSON.
Examines *Hamlet*, *Othello*, *Macbeth*, *King Lear*, *Julius Caesar*, *Antony and Cleopatra*, and *Coriolanus* in light of recent critical thought. Special attention given to psychoanalysis, historicism, and genre theory.
- 220. English Literature of the Early Renaissance.** Every other fall. Fall 1989. MR. REDWINE.
A critical study of the literature of the sixteenth century, with emphasis upon Elizabethan nondramatic poetry.
- 221. English Literature of the Late Renaissance.** Every other spring. Spring 1990. MR. REDWINE.
A critical study of the literature of the seventeenth century exclusive of Milton, with emphasis on the poetry of Donne, Jonson, and their followers.
- 222. Milton.** Every other year. Fall 1988. MR. REDWINE.
A critical study of his chief writings in poetry and prose.

- 230. Restoration and Early Eighteenth-Century Literature.** Every other year. Fall 1989.

Introduction to the variety and wealth of the period by reading such canonical authors as Dryden, Swift, Pope, and Defoe, as well as other dramatists (Etherege, Behn, Addison, Gay, Lillo) and writers (Astell, Finch, Montagu) of these years.

- 231. Late Eighteenth-Century Literature.** Every other year. Spring 1990.

Introduction to the period through such writers as Gray, Collins, C. Macaulay, Johnson, Goldsmith, Taylor, Sheridan, Boswell, Burney, and Wollstonecraft, among others.

- 240. English Romanticism.** Every other year. Fall 1988. MR. COLLINGS.

An intensive study of a few key Romantic texts by Blake, Wordsworth, Coleridge, P. B. Shelley, Mary Shelley, and Keats, informed by background readings in Milton and in current theoretical interpretations of the Romantics.

[241. Victorian Poetry and Prose.]

- 250. The Rise of the Novel.** Every other year. Spring 1989. MR. SANDONA.

This course traces the emergence of the novel in the eighteenth century as a distinct genre that absorbed earlier kinds of writing but also provided something new. Authors read include Cervantes, Bunyan, Defoe, Richardson, Fielding, Sterne, and Smollett.

Enrollment limited to forty.

- 251. The English Novel I.** Every other fall. Fall 1989.

- 252. The English Novel II.** Every other spring. Spring 1990. MR. LITVAK.

Continuity and change in the nineteenth-century novel. Austen, the Brontës, Dickens, Gaskell, Collins, Eliot, Hardy, and Gissing.

- 260. Twentieth-Century British Poetry.** Every other fall. Fall 1988. MS. REIZBAUM.

Authors will include Eliot, Auden, Yeats, Hugh McDermott, Stevie Smith, Dylan Thomas, Seamus Heaney, and a further selection from contemporary Scottish and Irish poetry.

- 261. Twentieth-Century British Fiction.** Every other spring. Spring 1989. MS. REIZBAUM.

Includes such figures as Hardy, Joyce, Lawrence, Woolf, Lessing, and Jean Rhys.

- 262. Modern Drama.** Every other fall. Fall 1989. Ms. REIZBAUM.

Plays from the late nineteenth and twentieth centuries. The course usually involves continental playwrights (e.g., Brecht, Chekhov) as well as British and American ones.

- 270. American Literature to 1860.** Every other fall. Fall 1988. Ms. DIEHL.

An overview of American literature from its Puritan origins to the mature works of the American Renaissance. We will examine the genesis and development of notions of history, national definition, and the function of the literary imagination in American life. Readings include selections from the works of Bradford, Bradstreet, Edwards, Taylor, Franklin, Irving, Emerson, Thoreau, Fuller, Poe, Hawthorne, and Whitman.

- 271. American Literature 1860-1917.** Every other spring. Spring 1989. Ms. GOODRIDGE.

Works by Chopin, Crane, Cather, O'Connor, Wright, Roth, Frost, Stevens, Moore, Williams, Plath, Roethke, and Dreiser.

- 272. American Fiction 1917-1945.** Every other fall. Fall 1989. Ms. GOODRIDGE.

Writers will include such figures as Hemingway, Fitzgerald, Dos Passos, and Faulkner.

Enrollment limited to forty.

- 273. American Fiction since 1945.** Every other spring. Spring 1990. Ms. GOODRIDGE.

Will include such figures as O'Connor, Welty, Updike, Barth, Bellows, and Pynchon.

Enrollment limited to forty.

- 274. American Poetry in the Twentieth Century.** Fall 1989.

- 275. Afro-American Fiction.** Fall 1988. Ms. PEMBERTON.

An examination of the development of the fictional genre of Afro-Americans, this course will trace the black American novel from its Civil War beginnings to the modern period. We will consider how these novels either challenge, deny, or mirror the American canon. Authors to be read include: Harriet E. Wilson, Nella Larsen, Richard Wright, Toni Morrison, Ralph Ellison.

Prerequisite: an English department freshman seminar or 200-level course.

- 276. Afro-American Poetry.** Spring 1989. Ms. PEMBERTON.

This course will look at the development of Afro-American poetry, beginning with an examination of the oral tradition, through early 20th-century black poets, the Negritude Movement, and revolutionary

poetry of the 1960s and 70s. Poets to be read include: Paul Laurence Dunbar, Claude McKay, Langston Hughes, Margaret Walker, Sonya Sanchez, and June Jordan.

Prerequisite: an English department freshman seminar or a 200-level course.

280. Women Writers in English. Every other spring. Spring 1989. Ms. DIEHL.

A study of traditions of women's writing. Course content may vary from year to year.

[281. Forms of Narrative.]

300. Literary Theory. Every other fall. Fall 1989. MR. LITVAK.

An analysis of semiotic, deconstructive, psychoanalytic, feminist, and Marxist theories of literature. Enrollment limited to fifteen.

Prerequisite: Consent of the instructor.

310-350. Studies in Literary Genres. Every year.

Lectures, discussions, and extensive readings in a major literary genre: e.g., the narrative poem, the lyric poem, fiction, comedy, tragedy, or the essay. Enrollment limited to fifteen.

319. Wallace Stevens and Later American Poetry. Fall 1988. Ms. GOODRIDGE.

After considering Stevens's poetry, prose, and selected letters, we will explore his influence on a number of other American poets. Writers will include Elizabeth Bishop, James Merrill, John Ashbery, and Vicki Hearne.

320. The Politics of Representation in the Nineteenth-Century Novel. Fall 1988. MR. LITVAK.

A study of the relationship between literary form and cultural ideology in novels by Charlotte Brontë, Thackeray, Dickens, Collins, Braddon, Eliot, James, and Wilde. Readings include theoretical and critical texts by Bakhtin, Foucault, Gilbert and Gubar, Sedgwick, Macherey, and others.

321. Shakespeare on Film and Television. Spring 1989. MR. COURSEN.

An examination of the Shakespearean script as it emerges onto the screen. Plays included will be *The Taming of the Shrew*; *A Midsummer Night's Dream*; *Henry V*; *Henry VI, Part II*; *Julius Caesar*; *Hamlet*; *King Lear*; and *Macbeth*.

Limited to students who have taken 210 and 211.

322. Shakespeare at Sonnets. Spring 1989. MR. REDWINE.

An examination of Shakespeare's *Sonnets* as the culmination of the Elizabethan poetic renaissance. Sonnets and sonnet sequences of other Renaissance poets will be compared. Special attention will be given to recent criticism on the subject.

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.

Environmental Studies

Administered by the Committee on Environmental Studies

ASSISTANT PROFESSOR LAINE, *Program Director*;

ADJUNCT VISITING PROFESSOR DELOGU; LECTURER GILFILLAN;

BECKY KOULOURIS, *Program and Course Assistant*

Requirements for the Coordinate Major in Environmental Studies:

The major involves the completion of a departmental major (1, below) and advanced work related to environmental studies (2).

1. The departmental major requirement may be satisfied by one of the three following approaches: (a) completion of the major requirements in either biochemistry, biology, chemistry, economics, or government; (b) the coordinate major in geology-environmental studies—**Geology 101, 102, 256**, and three additional courses in geology, **Physics 103, Chemistry 101, 102**, and two courses in mathematics; (c) completion of the major requirements in a department other than those listed above, *provided* that the student's program of studies is approved by the director as to its environmental content.

2. The following environmental studies courses are required:

a) Six courses related to environmental studies, offered by the program itself or by other departments. Relevant courses in any academic division of the curriculum will be identified by the Environmental Studies Committee on a regular basis. Independent study and some field courses may be included. Relevant courses in other departments that have been identified for the 1988-89 academic year are listed below. Other courses *may* qualify, with prior consultation and approval by the director. Also consult with the director concerning courses offered in previous years that may satisfy the program requirements.

No more than three of these six required courses may be in the area of the student's principal major. Areas of the curriculum are defined as follows:

Sciences: biochemistry, biology, chemistry, geology, physics, mathematics, neuroscience, psychology. *Social Sciences:* economics, government, history, sociology and anthropology. *Arts and Humanities:*

classics, art, dance, English, German, music, philosophy, religion, Romance languages, Russian.

- b) Senior course. A culminating course of one semester is required of majors during the senior year. Such courses are multidisciplinary, studying a topic from the perspectives of at least two of the three areas of the curriculum. **Environmental Studies 390 or 391** normally meets this requirement.

11. Global Environmental Change. Spring 1989. MR. LAINE.

An interdisciplinary examination of natural and artificial changes to the global environment in the past, present, and future. Topics will include, but not be limited to, evolution of the earth's atmosphere, climatic change through geological time, Quaternary environmental changes, the greenhouse effect, and nuclear winter. Emphasis will be placed on evaluating scientific evidence both qualitatively and quantitatively and reading in the literature when appropriate. Enrollment limited to fifteen. To be offered every other year.

Note: This course counts toward the natural science requirement.

101. Introduction to Environmental Studies. Every year. Fall 1988. MR. LAINE.

An examination of how the earth's major environmental systems work and an analysis of the relationship between these systems and such fundamental issues as population growth, resource and energy quality and sufficiency, and environmental quality. Explored in depth are the meaning and usefulness of scientific information and insights to such complex questions as quality of the atmosphere and climatic change, depletion of fresh water, loss of soil productivity, loss of genetic diversity, toxic contamination and waste disposal, and tropical deforestation. Enrollment limited to 60, with preference given to freshmen and sophomores.

200. Marine Ecology. Spring 1989. MR. GILFILLAN.

The relationships between organisms and their environment considered in the context of animals and plants living in the sea. The concept of marine communities living in dynamic equilibrium with their physical-chemical environment is introduced and the influences of human activities on the ecology of marine organisms is explored.

Prerequisite: A college-level science course, or consent of the instructor.

220. Environmental Law. Fall 1988. MR. DELOGU.

An examination of how society responds to environmental problems, considering a range of alternative legal strategies. Concepts in remedies, administrative law, and constitutional law, as well as eco-

nomics and the sciences, will be used to understand these problems and probable solutions.

- 225. Environmental Analysis: Political Philosophy.** Spring 1989 and Spring 1990. MR. SIMON.

An examination of environmental issues from the perspective of political philosophy. The tensions between collective responsibilities and individual rights, problems of collective decision-making and the formation of policy, and questions of justice and our responsibilities to others. Problems that may be addressed include energy policy, resource exhaustion, and waste disposal; agricultural policy, food policy and world hunger; acid rain; the greenhouse effect; population policy; and exploitation of oceanic resources and the pollution of the oceans.

- 235. Philosophy of Technology.** Spring 1989. MR. SIMON.

Modern technology is perhaps the most crucial factor shaping life in this century. Its growth, use, and abuse, and our increasing reliance on it, raise a number of philosophical questions, including: technology as a means for solving human problems and as a form of human expression; its impact on our relation to nature; views of technology as liberating versus imprisoning; and ethical and political problems raised by control and misuse of various technologies. (Same as **Philosophy 235**.)

- 390. Seminar in Environmental Studies.**

Fall 1988. **The Gulf of Maine.** MR. GILFILLAN.

This course will deal with the Gulf of Maine in the context of human impact on this highly productive body of water. The physical, chemical, and biological properties of the Gulf of Maine will be examined. The interactions between the Gulf of Maine and the surrounding human population, from pre-colonial times to the present, will be considered. The course will focus on present day problems such as shoreline development, fisheries, and international cooperation.

Prerequisite: Junior or senior standing and permission of the instructor.

- 290. Intermediate Independent Study.**

- 400. Advanced Independent Study and Honors.** THE PROGRAM.

CROSS LISTINGS

Sciences

- Biology 115. Ecology.** Fall 1988. MR. WHEELWRIGHT.

See **Biology 115**, page 116.

Prerequisite: **Biology 102**.

Chemistry 50. Interactions between Society and the Atmosphere. Fall 1988. MR. BUTCHER.

See **Chemistry 50**, page 120.

Geology 50. Ocean Basins and Margins. Spring 1989. MR. LAINE.

See **Geology 50**, page 153.

Geology 101. Introduction to Physical Geology. Fall 1988. THE DEPARTMENT.

See **Geology 101**, pages 153-154.

Geology 102. Introduction to Historical Geology. Spring 1989. THE DEPARTMENT.

See **Geology 102**, page 154.

Prerequisite: **Geology 101** or consent of the instructor.

Geology 220. Sedimentation and Stratigraphy. Fall 1989. MR. LAINE.

See **Geology 220**, pages 154-155.

Prerequisite: **Geology 50** or **101**.

Social Sciences

Anthropology 220. Hunters and Gatherers. Spring 1990. MS. KAPLAN.

See **Anthropology 220**, page 238.

Government 104. Ecology and Politics. Spring 1989. MR. RENSENBRINK.

See **Government 104**, page 160.

Sociology 151. Sociology of Health and Illness. Fall 1989. MS. BELL.

See **Sociology 151**, page 231.

Prerequisite: Sophomore standing.

Sociology 214. Science, Technology, and Society. Spring 1990. MS. BELL.

See **Sociology 214**, page 234.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

Humanities

Art 190. Architectural Design I. Spring 1989. MR. GLASS.

See **Art 190**, page 105.

Philosophy 58. Environmental Ethics. Fall 1988. MR. SIMON.

See **Philosophy 58**, page 198.

Other courses can be considered for full credit in the Environmental Studies Program with prior approval by the director. It is the student's responsibility to consult with the director and to demonstrate the course's relevance to his or her course of studies. An example of a course that falls into this category is:

Economics 217. Economics of Population. Spring 1990. MS. CONNELLY.

See **Economics 217**, pages 133-134.

Foreign Language Literature Courses in Translation

Each year the Departments of Classics, German, Romance Languages, and Russian may offer literature courses in English translation which are open to students with no training in the foreign language. A list of such courses follows. For detailed course descriptions, consult the departmental listings, pages 126, 156, 225, 227, and 229-230.

Classics

Classics 52. Greek Literature in Translation. Spring 1991. MR. AMBROSE.

Classics 53. Latin Literature in Translation. Spring 1989. MS. PRATT.

German

51. German Literature in Translation. Every fall. MR. CERF.

Fall 1988. **The Literary Imagination and the Holocaust.**

This course may be repeated for credit with contents changed.
Enrollment limited to 50.

Italian

322. Italian Literature in Translation. Every fall. Fall 1988. MS. RUGGIERO.

Russian

320. Nineteenth-Century Russian Literature. Fall 1989. MR. MILLER.

321. Twentieth-Century Russian Literature. Spring 1990. MS. KNOX.

322. Topics Course.

Fall 1988. **Women in Russian Society and Culture.** Ms. KNOX.

323. Dostoevsky and the Novel. Spring 1989. Ms. KNOX.

Spanish

322. Modern Spanish American Literature in English Translation.

Spring 1989. MR. TURNER.

Geology

PROFESSOR HUSSEY, *Chair*; ASSISTANT PROFESSOR LAINE; INSTRUCTOR LEA.

Students contemplating advanced study in geology should consult with the chair of the department as soon as possible. They should plan a joint major between geology and chemistry, physics, biology, or mathematics, or the geology-environmental studies coordinate major. **Geology 101** and **102** should be taken during the freshman year. By the end of the junior year **Mathematics 161** and **171**, two semesters of chemistry, and one semester of physics should be completed. A one-week field trip is taken during the second week of the spring vacation to illustrate the various aspects of the geology of the northern Appalachians. All coordinate, joint, and interdisciplinary geology majors are expected to participate in at least one of these trips during the junior or senior year.

Interdisciplinary Major: The department participates in an interdisciplinary program in geology and physics. See page 181.

Requirements for the Minor in Geology: The minor consists of two courses chosen from **Geology 50, 101, or 102**, and two courses chosen from **Geology 201, 211, 241, 256, 262, or 270**.

50. Geology of Ocean Basins and Margins. Every spring. Spring 1989. MR. LAINE.

The processes of erosion and sedimentation of shoreline and near-shore environments, emphasizing the delicate equilibrium of these environments; the morphology of and physical processes operating in the ocean basins; the origin and evolution of ocean basins in light of recent research in plate tectonics; the paleontologic and climatic record recorded in ocean sediments. Three hours of lecture per week.

No previous experience in science courses will be assumed.

101. Introduction to Physical Geology. Every fall. THE DEPARTMENT.

Lectures devoted to the composition and structure of the earth and the dynamic equilibrium processes that shape the surface of the earth.

Field and indoor laboratory studies include the recognition of common rocks and minerals, the interpretation and use of topographic and geologic maps, and dynamics of processes that shape our landscape. A one-day trip is taken to York County to examine evidence for glaciation, recent sea level changes, structures and types of metamorphic rocks, and sequence of intrusion of four major magma series. Three lectures and three laboratory hours each week.

No previous experience in science courses will be assumed.

102. Introduction to Historical Geology. Every spring. THE DEPARTMENT.

The principles involved in the interpretation of geologic history as deciphered from the rock record and a review of present knowledge of the evolution of the earth and its inhabitants. Laboratory work includes the recognition of fossils and their modes of preservation, interpretation of geologic maps, and a summary of the geologic history of the principal tectonic belts of North America. A three-day field trip is taken in the spring to illustrate important aspects of the geologic history of the southern and central coastal Maine area. Three lecture and three laboratory hours each week.

Prerequisite: **Geology 101** or consent of the instructor.

201. Earth Materials. Fall 1989 and 1991. MR. HUSSEY.

The identification, classification, origin, manner of occurrence, and uses of the principal rock-forming and economic minerals, rocks, and sediment types. Laboratory work includes both indoor and field examination and identification of rocks, minerals, and surficial sediments, emphasizing hand-specimen techniques. Three hours of lecture and a three-hour laboratory each week.

Prerequisite: **Geology 211**.

211. Optical Mineralogy and Crystallography. Spring 1989 and 1991. MR. HUSSEY.

Lectures devoted to morphological and X-ray crystallography, crystal chemistry, and optical mineralogy of the common rock-forming minerals. Laboratory work includes the examination and identification of minerals in thin section and as grains in immersion oil, using the polarizing microscope; morphological crystallography; and X-ray diffraction techniques. Three lecture hours and one three-hour laboratory each week.

Prerequisite: **Chemistry 101** or **Geology 50** or **101** or **Physics 103**.

220. Sedimentation and Stratigraphy. Fall 1989 and 1991. MR. LAINE.

An understanding of sedimentary processes, the evolution of sedimentary environments, and the use of stratigraphic techniques to

interpret earth history. Laboratory work focuses on sedimentary petrography and the classification of sedimentary rocks. A four-day required field trip over October break emphasizes field measurements of the sedimentological and stratigraphical characteristics of sedimentary rock bodies. Three hours of lecture and one three-hour laboratory each week.

Prerequisite: **Geology 50** or **101**.

241. Structural Geology. Fall 1988 and 1990. MR. HUSSEY.

The primary and secondary structures of rocks, and the interpretation of crustal deformation from these features. Laboratory work includes structural interpretation of geologic maps, construction of cross sections, and the use of stereographic projections and orthographic constructions in the solution of structural problems and presentation of data. Three lecture hours and three laboratory hours each week.

Prerequisite: **Geology 101** or **Geology 50** with consent of the instructor.

256. Environmental Geology. Fall 1988 and 1990. MR. LAINE.

The application of geological and geomorphological principles to the understanding and solution of contemporary and future land use issues. Principles will be mastered through both lectures and the reading of case studies. Field exercise emphasizes observation, mapping, and analysis of geologic information as it applies to coastal zone management.

Prerequisite: **Geology 101** or consent of the instructor.

262. Petrology. Spring 1990 and 1992. MR. HUSSEY.

The classification, description, and genesis of the common rock types. Three hours of laboratory work each week devoted to the identification of rocks in hand specimen and examination of thin sections with the use of the polarizing microscope. Three lecture hours and one three-hour laboratory each week.

Prerequisite: **Geology 201** or **Geology 211**.

270. Geomorphology. Fall 1988 and 1990. MR. LEA.

The concepts of landform development and evolution, emphasizing modern quantitative methods of study and interpretation, and applications to environmental planning. Three lecture hours and three laboratory hours per week.

Prerequisite: **Geology 11** or **51** and consent of the instructor.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

German

PROFESSOR HODGE, *Chair*; PROFESSOR CERF; ASSOCIATE PROFESSOR CAFFERTY; ASSISTANT PROFESSOR O'CONNOR; TEACHING FELLOW OKURDIL.

Requirements for the Major in German: The major consists of seven courses, of which one may be chosen from 51, 52 and the others from 205-402. Prospective majors, including those who begin with first- or second-year German at Bowdoin, may arrange an accelerated program, usually including Study Abroad. Majors are encouraged to consider one of a number of Study Abroad programs with different calendars and formats.

Requirements for the Minor in German: German 102 or equivalent, plus any four courses, of which two must be in the language (203-398).

11. Freshman Seminar. (in English Translation.) Fall 1988. **The Fool, The Rascal and the Dwarf.** MR. HODGE.

A tracing of the German epic tradition through three major works:

1. Wolfram von Eschenbach's *Parzival* is part of the medieval Arthurian material, treating the search for the Holy Grail. Within the framework of courtly society, it is also the development of the Pure Fool into the complete man through life experiences.

2. *Simplicissimus* by Grimmelshausen is a picaresque novel of the Thirty Years' War, which describes the very different development of another innocent formed by his experiences.

3. *The Tin Drum* is Günter Grass's greatest novel and contains, in the life of its hero, Oskar the dwarf, both the learning innocent and the clever knave, molding them into figures for the twentieth century.

51. German Literature in English Translation. Every fall. Enrollment limited to 50.

This course may be repeated for credit with contents changed.

Fall 1988. **The Literary Imagination and the Holocaust.** MR. CERF.

An examination of the literary treatment of the Holocaust, a period between 1933 and 1945, during which eleven million innocent victims were systematically murdered by the Nazis. Four different literary genres examined: the diary and memoir, the drama, poetry, and the novel.

Three basic sets of questions are raised by the course: (1) How could a Holocaust take place in the twentieth century? What were the latent racial prejudices that led to it? (2) To what extent is literature capable of evoking this bleak period? What different aspects of the Holocaust are stressed by the different genres? (3) What can our study of the Holocaust teach us with regard to contemporary issues surrounding totalitarianism and racism?

- 52. Myth and Heroic Epic of Europe.** Spring 1990. MR. HODGE.
 Myths, legends, sagas, and other folk literature of the Germanic, Celtic, Slavic, and Finno-Ugric traditions, e.g., the Prose and Poetic Eddas, Song of the Volsungs, Beowulf, Lay of the Nibelungs, the Mab-
 ingonian, the Cycle of Finn, the Cycle of Ulster, Marko the Prince, the Kalevala. Where possible and desirable, comparisons may be drawn with other mythologies; mythological and legendary material may be supplemented by relevant folkloric, Arthurian, and semihistorical literature. In English.
 For African myth and epic, see **Afro-American Studies 51**, pages 94-95.
- 54. Introduction to German Opera.** Spring 1989. MESSRS. CERF AND BECKWITH.
 See **Music 58**.
- 101, 102. Elementary German.** Every year. Fall 1988. MR. CERF. Spring 1989. MS. O'CONNOR.
 Three hours per week of training in grammar, speaking, composition, and reading. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.
- 203, 204. Intermediate German.** Every year. Fall 1988. MS. O'CONNOR. Spring 1989. MR. HODGE.
 Three hours per week of reading, speaking, composition, and review of grammar. One hour of conversation/drill with teaching assistant or teaching fellow. Language laboratory also available.
 Prerequisite: **German 102** or equivalent.
- 205. Advanced German Language.** Every year. Fall 1988. MR. HODGE.
 Designed to increase oral fluency, compositional skills, and understanding of spoken German. Stylistics and idiomatic usages may be emphasized.
 Prerequisite: **German 204** or equivalent.
- 308. Introduction to German Literature.** Every year. Spring 1989. MR. CERF.
 Introduction to methods of interpretation and critical analysis of works of German literature by genre: e.g., prose fiction, expository prose, lyric poetry, drama, opera, film, etc. The course will develop sensitivity to literary structures and techniques and introduce terminology for describing and analyzing texts.
- 313. The Development of Literary Classicism.** Fall 1989.
 Beginning with the reaction against the Age of Reason and continuing into the later works of Goethe and Schiller.
 Prerequisite: **German 204** or equivalent.

314. The Romantic Movement. Spring 1990.

Its literary philosophy, several schools of thought, and preferred genres, including consideration of such representative or influential figures as Tieck, A. W. and F. Schlegel, Kleist, Arnim, Brentano, Chamisso, Eichendorff, E. T. A. Hoffmann, and Schopenhauer.

Prerequisite: **German 204** or equivalent.

315, 316. Literature of the Nineteenth and Twentieth Centuries. Fall 1988. Ms. O'CONNOR. Spring 1989. Mr. CERF.

German literature ca. 1830-1945. Such authors as Hebbel, Storm, Meyer, Keller, Hauptmann, Hofmannsthal, Mann, Kafka, and Brecht are included.

Prerequisite: **German 204** or equivalent.

317. German Literature since 1945. Fall 1988. Ms. CAFFERTY.

Representative postwar authors from East and West Germany, Austria, and Switzerland.

Prerequisite: **German 204** or equivalent.

319. The Short Prose Form. Fall 1989.

Unique theory, form, and content of the German *Novelle* as it has developed from Goethe to the present.

Prerequisite: **German 204** or equivalent.

398. Seminar in Aspects of German Literary History. Every spring.

Work in a specific area of German literature not covered in other departmental courses, e.g., individual authors, literary movements, genres, cultural influences, and literary-historical periods. *This course may be repeated for credit with contents changed.*

Prerequisite: **German 204** or equivalent.

Spring 1989. **Post-War German Film.** Ms. O'CONNOR.

A history of German film from 1945 to the "New German Cinema" of the 60s and 70s with particular attention to the question of the (re-) presentation of German history. Films include *Wir Wunderkinder*, *Die Ehe der Maria Braun*, *Die Patriotin*, *Deutschland, bleiche Mutter* and excerpts from *Heimat* and *Shoab*. Readings and classroom discussions will provide an introduction to cinematic analysis and an engagement of broader issues such as film and social history, representations of women, and the politics of culture. Attendance at film screenings outside scheduled class hours is required. Films and discussions in German; readings in English and German.

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.

Government and Legal Studies

PROFESSOR RENSENBRINK, *Chair*; PROFESSORS MORGAN, POTHOLM, AND YARBROUGH; VISITING TALLMAN PROFESSOR ADAIR; ASSOCIATE PROFESSOR SPRINGER; ASSISTANT PROFESSORS AYUBI, HUSKEY, MARTIN, AND WEIGLE; VISITING LECTURER IN GOVERNMENT ISAACSON

Requirements for the Major in Government and Legal Studies: Courses within the department are divided into five fields: American government (**Government 200, 201, 202, 203, 204, 210-211, 250, 270, 301, 302, and 341**), comparative politics (**Government 223, 224, 225, 226, 227, 230, 235, 275, 280, 321, and 362**), political theory (**Government 225, 240, 241, 242, 250, 255, 341, and 342**), international relations (**Government 226, 227, 235, 260, 261, 270, 271, 275, 280, 361, and 362**), and public policy (**Government 202, 203, 204, 210-211, 255, 270, 275, 301, and 341**). Every major is expected to complete an area of concentration in one of these fields.

The major consists of one Level A course, six Level B courses, and one Level C course, distributed as follows:

1. A field of concentration, selected from the above list, in which at least two Level B courses and one Level C course are taken.
2. At least one Level B course in each of three fields outside the field of concentration.

Students seeking to graduate with honors in government and legal studies must have an excellent academic record. Interested students should contact the Honors director for specific details. Students must prepare an honors paper, which is normally the product of two semesters of independent study work, and have that paper approved by the department. One semester of independent study work may be counted toward the eight-course departmental requirement and the three-course field concentration.

Requirements for the Minor in Government and Legal Studies: A minor in government and legal studies will consist of one Level A course and four Level B courses from three of the departmental subfields.

Level A Courses

Government 100

Introductory Seminars

Topics and course requirements will vary from seminar to seminar and year to year according to the interests of the instructor. All are designed to provide an introduction to a particular aspect of government and legal studies. Students are encouraged to analyze and discuss important political concepts and issues, while developing research and writing skills.

Enrollment is limited to twenty in each seminar. Freshmen are given first priority; sophomores are given second priority. If there are any remaining places, upperclassmen may be admitted with consent of the instructor.

Fall 1988

- 101. **Comparative Politics.** MS. WEIGLE.
- 102. **Caribbean Forms.** MR. POTHOLM.
- 103. **The Pursuit of Peace.** MR. SPRINGER.
- 106. **Aspects of Political Theory.** MS. YARBROUGH.
- 108. **American Politics. The Washington Scene.** MR. ADAIR.

Spring 1989

- 104. **Ecology and Politics.** MR. RENSENBRINK.
- 105. **American Politics: Representation, Participation, and Power.**
MS. MARTIN.
- 107. **Islam and Politics.** MS. AYUBL.
- [111. **Introduction to American Politics.**]
- 160. **Introduction to International Relations.** Spring 1989. MR. POTHOLM
and MR. SPRINGER.

Identifies and explains patterns of interaction among nation-states. Focuses on developments since World War II, but many lectures draw on material from other periods. Such topics as the nature of man and the causes of war, the international espionage subculture, revolutionary change, and environmental constraints are considered. Enrollment is limited to one hundred fifty students.

Level B Courses

Level B courses are designed generally for students with a previous background in government and legal studies. All, unless otherwise noted, require that a student have taken a Level A course or have received the consent of the instructor. Course requirements will vary from course to course, but most of the courses at this level adopt a lecture format. All Level B courses are limited to fifty students.

[200. Local Governments.]

- 201. **Law and Society.** Spring 1989. MR. MORGAN.

An examination of the American criminal justice system. Although primary focus is on the constitutional requirements bearing on criminal justice, attention is paid to conflicting strategies on crime control, to police and prison reform, and to the philosophical underpinnings of the criminal law.

Prerequisite: Junior-year standing.

202. The American Presidency. Spring 1989. Ms. MARTIN.

An examination of the presidency in the American political system, including presidential selection, advisory systems, the institutionalized presidency, and relations with Congress and the courts. Problems and techniques of presidential decision-making.

[203. Elections, Parties, and Interest Groups in America.]**204. Congress and the Policy Process.** Fall 1988. Ms. MARTIN.

An examination of the U.S. Congress with a focus on the congressional role in the policy-making process. Topics will include recent changes in the budgetary process, congressional procedures and their impact on policy outcomes, and executive-congressional relations.

***210, 211. American Constitutional Law.** Every year. MR. ISAACSON.

Constitutional principles in the United States. The case method is used in the presentation of material.

Prerequisite: Junior- or senior-year standing, or consent of the instructor.

†223. African Politics. Fall 1988. MR. POTHOLM.

An examination of the underlying political realities of modern Africa. Emphasis on the sociological, economic, historical, and political phenomena which affect the course of politics on the continent. While no attempt is made to cover each specific country, several broad subjects, such as hierarchical and polyarchical forms of decision making, are examined in depth. There is a panel discussion with African students and scholars at the end of the course.

224. Western European Politics. Every other year. Spring 1989. Ms. WEIGLE.

An introduction to the varieties of democratic politics in Western Europe. The course will be approached topically, with components on the state and bureaucratic politics, parties and interest groups, and voting and public opinion. Recent theoretical literature on the democratic state and on state-group relations will supplement traditional readings focusing on political institutions and behavior in four countries: France, Great Britain, Sweden, and West Germany.

[225. Political Analysis and the Forces of Change.]**226. Middle East Politics.** Fall 1988. Ms. AYUBI.

An examination of the historical, cultural, economic, and social forces which affect Middle East political processes.

[†227. Ethnicity and Politics in South and Southeast Asia.]

230. Soviet Politics. Spring 1989. Ms. WEIGLE.

An introduction to the domestic politics of the USSR. The first half of the course is devoted to Soviet political development and to problems of conceptualization in the study of Soviet socialism. The second half examines the party and government bureaucracy: its structure, personnel, internal relations, links with society, and its handling of pressing issues of public policy.

[235. Advanced Comparative Government.]**240. Political Theory: Ancient to Modern Thought.** Fall 1988. MR. RENSENBRINK.

An analysis of Western political thought from the time of the Greek *polis* to the Renaissance and the early modern state.

241. Political Theory: Modern and Contemporary Thought. Spring 1989. Ms. YARBROUGH.

An analysis of modern western political thought, including the work of contemporary theorists.

242. Gender, Race, and Class: The Politics of Otherness. Spring 1989. MR. RENSENBRINK.

The course examines the concept and political implications of "the other" as manifested first of all in gender conflict and relations and by extension in race and class conflict and relations. The aim is to build theoretical and practical foundations for thinking about public affairs and the state in a culturally heterogeneous society. Readings are drawn from contemporary and classical texts and from the writings of those engaged in gender, racial, and class struggles. A seminar method of teaching is employed.

250. American Political Thought. Fall 1989. Ms. YARBROUGH.

Considers the classic elements of the history of American political thought from the founding period to the present. The course will not attempt to cover every age or every thinker but aims instead for some depth on selected topics of debate between major American political thinkers. Concludes with an exploration of a variety of interpretations of the history of American intellectual and political thought.

255. Approaches to Political Science: Quantitative Analysis in Political Science. Fall 1988. Ms. MARTIN.

An introductory course in research methods, with a focus on quantitative techniques used in political science. Topics include the benefits and limitations of quantitative methods, research design, measurement, survey research, and an introduction to basic statistical analysis. Instruction in the use of computer-based statistical programs. (No

prior experience in computing or statistical analysis is assumed or necessary.)

260. International Law. Fall 1988. MR. SPRINGER.

The modern state system, the role of law in its operation, the principles and practices which have developed, and the problems involved in their application.

[261. International Organization.]

270. American Foreign Policy: Its Formulation and the Forces Determining Its Direction. Spring 1989. MR. SPRINGER.

The major theories concerning the sources and conduct of American foreign policy since World War II. The approach emphasizes the interrelationship of political, social, and economic forces which shape United States diplomacy.

Prerequisite: Sophomore standing.

271. Soviet Foreign Policy. Fall 1988. MS. WEIGLE.

Examines Soviet conduct in world affairs from the October Revolution of 1917 to the present. The development of Soviet perceptions, motivations, and modes of behavior in international relations will be analyzed against the background of the changing world order and the maturing system of state socialism in the Soviet Union.

†275. Advanced International Politics: North-South Relations. Spring 1989. MS. AYUBI.

An examination of new approaches to the study of international politics with emphasis on North-South relations. The course meets the non-eurocentric studies requirement.

Level C Courses

Level C courses provide seniors (and juniors, with the consent of the instructor) an opportunity to do advanced work within their fields of concentration. This may be done in the context of a seminar or through independent study with a member of the department, or through the honors seminar.

[301. Advanced Seminar in American Politics: Reforming the Intelligence Agencies.]

302. Colloquium in Law and National Security. Spring 1989. MR. MORGAN.

304. Advanced Seminar in American Politics. Spring 1989. MR. ADAIR.

341. **Advanced Seminar in Political Theory: Politics of Utopia.** Fall 1988. MR. RENSENBRINK.
342. **Advanced Seminar in Political Theory.** Spring 1989. MS. YARBROUGH.
361. **Advanced Seminar in International Relations: Conflict Simulation and Conflict Resolution.** Spring 1989. MR. POTHOLM.
362. **Advanced Seminar in International Relations and Comparative Government: Terrorism:** Fall 1988. MS. AYUBI.
400. **Advanced Independent Study and Honors.** THE DEPARTMENT.

History

PROFESSOR NYHUS, *Chair*; PROFESSORS HOWELL, LEVINE, AND WHITESIDE; ASSOCIATE PROFESSORS KARL, SMITH AND STAKEMAN; ASSISTANT PROFESSORS MCMAHON AND WELLS; LECTURERS HOCHSTETTLER AND JERVIS

Requirements for the Major in History: The departmental offerings are divided into the following fields: Europe (may be divided into two fields: Europe to 1715 and Europe since 1500), Great Britain, United States, East Asia, Africa, and Latin America. In meeting the field requirements, courses in Europe between 1500 and 1715 may be counted toward early or modern Europe but not toward both of them. At least one field must be in East Asia, Africa, or Latin America. Students may, with departmental approval, define fields which are different from those specified above.

The major consists of eight courses, distributed as follows:

1. A primary field of concentration, selected from the above list, in which four or more courses are taken. One of the courses must be numbered in the 300s, selected with departmental approval, in which a research essay is written.
2. Two supplemental fields, in each of which two courses are taken.

Economics 208 and **Biology 51** may be counted toward the history major.

All history majors seeking departmental honors will enroll in at least one semester of the Honors Seminar (**History 451, 452**). Its primary requirement is the research and writing of the honors thesis. In addition, the seminar is to provide a forum in which the students, together with the faculty, can discuss their work and the larger historical questions that grow out of it.

With departmental approval a student may offer for credit toward the history major college-level work in history at other institutions. This work

may represent fields other than those that are available at Bowdoin. A student who anticipates study away from Bowdoin should discuss with the department, as early in his or her college career as possible, a plan for the history major which includes work at Bowdoin and elsewhere.

The freshman-sophomore seminars listed under **History 10-25** are not required for the major, but such seminars may be counted toward the required eight courses.

Before electing to major in history, a student should have completed or have in progress at least two college-level courses in history.

History majors are encouraged to develop competence in one or more foreign languages and to use this competence in their historical reading and research. Knowledge of a foreign language is particularly important for students planning graduate work.

Each major should select a departmental adviser. A student should plan, in consultation with his or her adviser, a program that progresses from introductory to advanced levels. The courses numbered in the 300s presuppose a reasonable background understanding. They are open with the consent of the instructor to history majors and other students, normally upperclassmen.

Enrollment in a problems course is limited to fifteen students. Each freshman-sophomore seminar (**History 10-25**) is limited to twenty. Other history courses are limited to seventy-five students each.

Requirements for the Minor in History: The minor consists of five courses, three to be taken in a field of concentration chosen from the list specified by the department for a major. The remaining two are to be in a subsidiary field selected from the same list.

East Asian Studies Concentration: Majors in history may elect the East Asian Studies Concentration, which consists of the following requirements: four courses in East Asian history, including at least one research seminar; two courses in a field of history other than East Asian; and four semesters of Chinese or Japanese language.

Foreign study for students interested in East Asian studies is highly recommended. Established programs in Hong Kong, Taiwan, Japan, and the People's Republic of China are available. Consult the instructor in East Asian history for information about various programs.

Course Selection for Freshmen: Although courses numbered 10-25 and 101-102 are designed as introductory courses, freshmen may if they wish enroll in courses numbered 201-279.

10-21. Freshman Seminars.

The following seminars are introductory in nature. They are designed for freshmen who have little background in history generally or in the period and area in which the particular topic falls. Enrollment is limited to twenty students in each seminar.

Objectives are (a) to cover the essential information relating to the topic, together with a reasonable grounding in background information; (b) to illustrate the manner in which historians (as well as those who approach some of the topics from the point of view of other disciplines) have dealt with certain significant questions of historical inquiry; and (c) to train critical and analytical skills.

The seminars are based on extensive reading, class discussion, oral reports, two or three short critical essays, and an examination.

Seminar 10. Jewish Life in Medieval Europe. Spring 1989. Mr. NYHUS.

View of Western European life through the eyes of the Jewish minority. Readings include the writings of the Jewish people. Social theories which seek to explain the relation between a majority and minority culture examined. Several short essays required.

Seminar 11. Women in Britain and America, 1750-1920. Fall 1989. Ms. McMAHON.

A comparative examination of the contribution of women to and the consequences for women of "modernization." Topics include industrialization and the varieties of employment for women, Victorian culture and domesticity, and women's rights and woman suffrage. Relies heavily on primary sources: letters, diaries, essays, prescriptive literature, fiction; secondary sources used as guides in the reading of those contemporary sources. Designed to teach students how to subject primary and secondary source materials to a critical analysis.

[Seminar 12. American Democracy in Theory and Practice since 1776.]

Seminar 13. The Individual and Community in America. Fall 1988. Mr. WHITESIDE.

It is often alleged that the United States, in contrast to other countries, values individualism more than the interests of the community as a whole. The nature of American individualism will be sought in the writings of representative Americans and foreign observers, past and present. Specific themes will include aspects of the revolutionary generation and the Constitution, politics, family and occupational patterns, environmental concerns, foreign policy, education, and popular culture. Readings, discussions, oral presentations, and several critical essays.

Seminar 14. Soviet Russia Through Personal Accounts. Fall 1988. Mr. KARL.

An analysis of the Soviet scene, people, and society as reflected in the works of foreign travelers and Russian memoirists.

Seminar 18. The Vietnam War. Spring 1989. MR. LEVINE.

An examination of the Vietnam War from the Vietnamese and American viewpoints. Major topics include: the nature of Vietnamese society, impact of French Colonialism, cold war background (domestic and foreign) to American involvement, and impact of war on Vietnam and the United States.

†Seminar 20. Traditional China. Spring 1990. MR. SMITH.

Designed to teach the successful reading of primary sources: how to locate an argument, identify the author's assumption, and draw implications from a text. After introductory lectures on the history of late imperial China (1368-1911), students read a wide variety of translated documents, including diaries, collections of religious precepts, tenancy agreements, etc. Frequent one-page papers. (Same as **Asian Studies 20.**)

†Seminar 21. The Chinese Cultural Revolution. Spring 1989. MR. SMITH.

The Cultural Revolution (1966-1976) is now condemned by the Chinese government as enthusiastically as it was once heralded. What happened? This course has two interrelated goals: to study a complex historical problem and to learn how to read critically in historical materials, both primary and secondary. (Same as **Asian Studies 21.**)

[101. Europe from Ancient Greece through the Reformation.]**[102. History of Modern Western Civilization.]****†103. Asian Civilizations.** Fall 1988. MR. SMITH.

An introduction to selected texts of South and East Asian civilizations, emphasizing Buddhist cultures in India, Tibet, China and Japan. Normally each week the course will meet once as a whole for lecture and once in small discussion groups, in which a particular text will be analyzed in detail. Frequent short papers, several longer papers. (Same as **Asian Studies 101.**)

201. Ancient Greece. Every other year. Fall 1988. MR. NYHUS.

A survey of the political, social, and economic history of Greece from the second millennium B.C. through the Hellenistic period. Focus on the fifth century B.C. Extensive selections of Herodotus and Thucydides as well as dramatists, poets, and philosophers.

202. Ancient Rome. Every other year. Fall 1989. MR. NYHUS.

A survey of the political, social, and economic history of the Republic and Empire. Extensive selections of Livy, Tacitus, and Suetonius as well as literary texts.

- 203. Europe in the Middle Ages, 1050-1300.** Fall 1989. MR. NYHUS.

A survey covering political and social institutions as well as intellectual and cultural movements of twelfth- and thirteenth-century Europe.

[204. Renaissance Europe.]

- 205. The Intellectual History of the Renaissance and Reformation.** Spring 1990. MR. NYHUS.

Investigation of the ideologies of the Renaissance and Reformation in their social settings. Authors from the fourteenth through the sixteenth centuries are studied to determine the ways in which they reflected and shaped their societies. Authors considered include Dante, Petrarch, Marsiglio, Salutati, Machiavelli, Castiglione, Erasmus, More, Luther, Calvin, Rabelais, Montaigne, and Bodin.

- 206. Florence and Strasbourg during the Renaissance.** Spring 1989. MR. NYHUS.

An analysis of the economic, social, and political structures of two key cities of the Renaissance together with the culture which made them famous.

- 211. Europe 1517-1715: Reformation to Louis XIV.** Spring 1990. MR. KARL.

The Reformation serves as introduction to the social, political, and intellectual development of continental Europe to the death of Louis XIV.

- 212. Europe 1715-1848: Enlightenment, Revolution, and Napoleon.** Fall 1988. MR. KARL.

A survey of continental European evolution from the death of Louis XIV to the revolutions of 1848, with focus on the French Revolution and its role in European development.

- 213. War and Society in Modern Europe 1740-1945.** Spring 1989. MR. HOCHSTETTLER.

This course deals with war, the threat of war, and the effects of war on European society from the time of the Seven Years' War through World War II. The primary focus of the course is on the intertwining of military with political, social, and economic developments in European history during this period. Using warfare as an organizing theme for historical study, the student will confront other broad themes of European history: the triumph of the nation state over the dynastic or territorial state; the emergence of democratic principles of political organization; the demise of the social order of the *ancien regime*; the effects of industrialization on the European power structure; and the influence of

war on diplomacy and international relations. Students will study military theory and practice as well as examine how attitudes toward war and its uses changed over time.

215. Germany 1900-1945. Fall 1989. MR. KARL.

After a brief survey of German development, the course focuses on the reasons for the rise of National Socialism and particularly on the nature of the Nazi dictatorship.

217. History of Russia to 1825. Spring 1989. MR. KARL.

A broad survey beginning with medieval Russia but concentrating on the rise of Muscovy, Peter the Great, and the development of autocracy and serfdom down to the Decembrist revolt.

218. History of Russia: 1825 to the Present. Spring 1990. MR. KARL.

Begins with the reign of Nicholas I and focuses mainly on the long-term coming, course, and aftermath of the Revolution of 1917.

220. The British Experience. Fall 1988. MR. HOWELL.

Examination of selected topics in the social, cultural, intellectual, economic, and constitutional history of the British Isles as a means of understanding the distinctive elements in the British experience. Emphasis is placed on an interdisciplinary approach to such subjects as the making of the landscape, the concept of nationhood, the role of tradition, the social dimensions of the arts, religious expression, popular culture, and the experience of immigrant groups.

221. History of England to 1550. Spring 1990. MR. HOWELL.

A survey of the political, cultural, intellectual, social, and economic aspects of English life from pre-Roman times to the Reformation.

222. History of England from the Sixteenth to the Nineteenth Century. Spring 1989. MR. HOWELL.

A survey of political, cultural, intellectual, social, and economic developments in England from Elizabeth to the death of George III.

223. History of England from 1800 to the Present. Fall 1989. MR. HOWELL.

A survey of the cultural, intellectual, political, constitutional, social, and economic development of England.

225. The British Empire and Commonwealth. Fall 1989. MR. HOWELL.

An introduction to certain continuous themes in British imperial history with an emphasis on the period from 1783 to the present. The course is comparative in approach and from time to time deals with colonies, empires, and policies of other nations than the British in order to provide a general examination of colonialism, imperialism, race, and overseas settlement.

- 226. Topics in British Imperial and Commonwealth History.** MR. HOWELL.

The Evolution of British India. Fall 1988.

Analysis of the British presence in India from the formation of the East India Company until the transfer of power and the creation of dominion status for India and Pakistan. Cultural interactions as well as political and economic relationships are emphasized.

- 229. The Growth of the Welfare State in Britain and America, 1834-present.** Spring 1990. MR. LEVINE.

A study in comparative history of the ideology and institutions of welfare state in two countries which are similar in some ways but quite different in others. Readings in the laws, legislative debates, ideological statements, and economic and sociological analyses.

- 230. Interpretations of American History.** Fall 1988. MR. LEVINE.

Consideration of four or five topics from the American Revolution to the present, all related to social change: how historians have disagreed with each other, the nature of historical inquiry, and the relationship between past and present. Readings include Hartz, *The Liberal Tradition in America*; Lowi, *The end of Liberalism*; Hamilton, *Report of the National Bank*; and Collingwood, *The Idea of History*. Students read different works on the same subject and in class discuss what ways the historians agree and disagree with each other, and why. Particularly useful for history majors, since there is some explicit concentration on philosophy of history and historiography. Non-majors may find it useful as a review survey of American history, and for practice in reading analytically and writing critical essays.

- 231. Social History of Colonial America, 1607-1763.** Fall 1989. MS. MCMAHON.

A study of the founding and growth of the British colonies in North America. Explores the problems of creating a new society in a strange environment; the effects of particular goals and expectations on the development of the thirteen colonies; the gradual transformation of English, African, and Indian cultures; and the later problems of colonial maturity and stability as the emerging Americans outgrew the British imperial system.

- 233. American Society in the New Nation, 1763-1840.** Spring 1989; Spring 1990. MS. MCMAHON.

A social history of the United States from the Revolutionary era through the Age of Jackson. Topics include the social, economic, and ideological roots of the movement for American independence; the struggle to determine the scope of the Constitution and the shape of

the new republic; the emergence of an American identity; and the diverging histories of the North, South, and West in the early nineteenth century.

[235. **The American Civil War.**]

[236. **American Society and Thought, 1865-1917.**]

[237. **Foreign Relations of the United States since 1898.**]

238. **The United States and Asia since 1789.** Fall 1988. MR. WHITESIDE.

The American participation in efforts to "open" China and Japan. Economic activity. The missionaries. Diplomatic contacts. The war with Spain and the acquisition of the Philippines. The Open Door notes. World War I, the Washington Conference, and Japan. America and the struggle between Nationalists and Communists in China. Pearl Harbor and World War II. Taiwan and mainland China since 1949. America and Japan since the occupation. Korea. Southeast Asia and the Vietnam conflict.

240. **The United States since 1945.** Spring 1989. MR. LEVINE.

Consideration of social, intellectual, political, and international history. Topics include the cold war; the survival of the New Deal; the changing role of organized labor; Keynesian, post-Keynesian or anti-Keynesian economic policies; the urban crisis. Readings common to the whole class and the opportunity for each student to read more deeply in a topic of his or her own choice.

[241. **American Environmental History.**]

243. **The Civil Rights Movement.** Fall 1989. MR. LEVINE.

Concentrating on the period from 1954 to 1970, a major point of this course will be to show how various individuals and groups have been pressing for racial justice for decades. Special attention paid to social action groups ranging from the NAACP and SNCC, and to important individuals, both well-known (Booker T. Washington) and less well known (John Doar). Readings mostly in primary sources. Extensive use of the PBS video series "Eyes on the Prize."

[†244. **The Afro-American in American Society since Emancipation.**]

†245. **Afro-American Religion and Its Music: Redemption Songs.** Spring 1990. MR. STAKEMAN.

By focusing on black religious music in the Americas, considers how specific historical contexts have shaped and reflected the development of a distinctly Afro-American church, theology, and folk religion. Examines the different interactions of African and European cultures

which have produced a variety of Afro-American cultures, the social role of the black minister, the social stratification of black Protestant denominations, the social roles within church services, the social welfare functions of churches, and black millenarianism. Topics include slavery and the spiritual, the black peasantry and folk blues, urbanization and gospel music. (Same as **Afro-American Studies 245.**)

246. Women in American History. Fall 1988. Ms. McMAHON.

A social history of American women from the colonial period to the present. Examines the changing roles and circumstances of women in both public and private spheres, focusing on family responsibilities, paid and unpaid work, education, ideals of womanhood, women's rights, and feminism. Class, ethnic, religious, and racial differences—as well as common experiences—are explored.

248. Family and Community in American History. Spring 1989. Ms. McMAHON.

An examination of the American family as a functioning social and economic unit within the community from the colonial period to the present. Topics include gender relationships; the purpose of marriage; philosophies of child-rearing; demographic changes in family structure; organization of work and leisure time; relationships between nuclear families and both kinship and neighborhood networks; and the effects of industrialization, urbanization, immigration, and social and geographic mobility on patterns of family life.

†250. History of Mexico. Fall 1988. MR. WELLS.

This course will trace the historical evolution of our southern neighbor, Mexico. Although we will start with a brief look at the pre-Hispanic past, Spanish settlement and colonization, and the chaotic nineteenth century, a significant share of the course will examine twentieth century Mexico; its problems and prospects for the future. Among the topics to be explored: U.S.-Mexican relations, immigration and other “border” problems, the debt crisis, the oil syndrome, the future of the PRI in Mexico, and the impact of revolutionary movements in Central America on Mexico.

†252. Colonial Latin America. Fall 1988. MR. WELLS.

Most modern writers refer to a “traditional society” in Latin America that has proved remarkably resistant to innovation and social change. This course provides an in-depth analysis of the crucial formative stages of this traditional society. By tracing the development of a new culture brought about by the interaction and fusion of European, Indian, and African elements, we can begin to understand the rich and diverse heritage of Latin Americans and how the revolutions of modern

Latin America owe their debt to the legacy of the past. Among the topics to be discussed: pre-Columbian Indian civilizations; first contacts with Europeans; the transition from a conquest to a settler society; European institutions of domination and social control (land, labor, and religion); race mixture; tensions between Europe and the colonies; and the Wars of Independence.

†255. **Modern Latin America.** Spring 1989. MR. WELLS.

An important segment of this course will trace the roots of revolutionary discontent in Latin America, *from a Latin American, as well as a North American perspective*. This course provides a topical survey of Latin American history from its independence wars, through the calamitous nineteenth-century to the unstable 1980s. Among the subjects to be explored: neocolonialism; dictators and the role of the military; United States-Latin American relations; imperialism; and the internal/external dynamic of revolutionary movements in the hemisphere.

†261. **Precolonial Africa: An Introduction to African History.** Fall 1988. MR. STAKEMAN.

An introduction to African family, social, and political organization before the advent of colonialism which will explore the roots and complexities of Africa's present economic underdevelopment. Topics will include economic organization in non-capitalist societies, migration as a force in African history, the empires of the ancient Sudan, politics and trade, the slave trade, and European contacts with Africa before colonialism. Recommended for freshmen and other beginning African history students.

†262. **Colonialism in Africa.** Spring 1989. MR. STAKEMAN.

Selected topics in the history of Africa since European colonization, including Africa on the eve of colonization, African participation in the advent of colonialism, the economic roots of colonialism, the establishment of colonial rule, African resistance to colonial rule, colonial administration, the emergence of new African political elites, the colonial economy, religious reactions to colonialism, the growth of political nationalism, violence as a political process, decolonization, the concept of underdevelopment, and assessments of colonial experience.

†263. **Africa since Independence.** Fall 1989. MR. STAKEMAN.

An examination of Africa during the turbulent period since independence. Examines African political stability and instability, problems of development, the colonial legacy, urbanization, the transformation of the family and the creation of new social roles. Particular attention will be paid to the changing economic and social roles of women.

†264. **Islam in Africa.** Fall 1988. MR. STAKEMAN.

This course will focus on Islam as a theological system and as an ideology which orders social relations in African societies. The course will place particular emphasis on the role of women in African Islamic societies. Other topics include Islamic diasporas in Africa, the syncretization of African and Islamic beliefs, Islamic minorities in non-Islamic societies, Islam and underdevelopment, Islamic socialisms, and Islam in the modern world.

†265. **The Political Economy of Southern Africa.** Fall 1989. MR. STAKEMAN.

The racial turmoil in southern Africa has been a matter of global concern for some years. This is an introduction to the political and economic processes that have shaped black-white relations in the region and an examination of the international implications of continued unrest.

†270. **Chinese Thought in the Classical Period.** Spring 1991. MR. SMITH.

An introduction to the competing schools of Chinese thought in the time of Confucius and his successors. Lectures provide background in the developments of Chou dynasty society (ca. 1032-256 B.C.), but most work takes place in conference discussions of the philosophers' original texts and in a series of related short papers. (Same as **Asian Studies 270.**)

272. **The T'ang.** Fall 1989. MR. SMITH.

History of China during the T'ang dynasty (609-916). Multidisciplinary investigation of reunification, state-building, and expansion; the rise of schools of Chinese Buddhism; and elite culture, including *shih* poetry. (Same as **Asian Studies 272.**)

†274. **Chinese Society in the Ch'ing.** Fall 1990. MR. SMITH.

An introduction to premodern China, focusing on the first half of the Ch'ing dynasty (1644-1911). Discussion of societal relations and their justifications: state organization, human interaction, ideology. Culminates in a day-long simulation of elite society in the eighteenth century, with students taking roles from merchant and local gentry to magistrate and emperor. (Same as **Asian Studies 274.**)

†275. **Modern China.** Spring 1990. MR. SMITH.

An introduction to the history of China from 1840 to the present. Studies the confrontation with western imperialism, the fall of empire, the Republican period and the Peoples' Republic. (Same as **Asian Studies 275.**)

†278. **The Foundations of Tokugawa Japan.** Spring 1989. MR. SMITH.

Addresses problems in the creation and early development of Tokugawa (1600-1868) state and society: the transformation of samurai from professional warriors to professional bureaucrats, the Confucian challenges to Buddhism, and the unanticipated growth of a quasi-autonomous culture. (Same as **Asian Studies 278.**)

Problems Courses

Courses 300 through 373 involve the close investigation of certain aspects of the areas and periods represented. Following a reading in and a critical discussion of representative primary and secondary sources, students develop specialized aspects as research projects, culminating in oral presentations and written essays. Adequate background is assumed, the extent of it depending on whether these courses build upon introductory courses found elsewhere in the history curriculum. Enrollment in these courses requires the consent of the instructor. Majors in fields other than history are encouraged to consider these seminars.

Problems in Early European History.

300. **The Social History of the Reformation.** Fall 1988; Spring 1990. MR. NYHUS.

A research seminar on the social structures of Germany, France, and Switzerland in the early sixteenth century together with a study of the program of the reformers and the reasons for the popular reception of that program.

Problems in Modern European History.

310. **The Stalin Era.** Fall 1989. MR. KARL.

Investigates the Stalinist dictatorship from its formation in the 1920s to its apogee and demise after World War II. Preference given to seniors and juniors in that order.

311. **Nazi Germany.** Spring 1989. MR. KARL.

A research seminar, with a major research project and paper. Preference given to seniors and those with **History 215**, or equivalent.

Problems in British History.

320. **The English Revolution.** Spring 1991. MR. HOWELL.

The English revolution of the seventeenth century with particular attention to conflicting models of the causes and course, the conflict between the search for order and left-wing demands for reform, and the place of the revolution within the context of the European revolutionary tradition.

321. Britain in the Twentieth Century. Spring 1990. MR. HOWELL.

A research seminar on the changing condition of Britain since 1914. Particular emphasis on changing conceptions of the role of the state, the process of loss of empire, the Irish problem, stresses within contemporary British society, and the cultural response to changing conditions.

322. Elizabethan England. Spring 1989. MR. HOWELL.

A research seminar on Elizabethan England. Particular emphasis on the social and economic backgrounds to political and cultural developments.

Problems in American History.**330. Radicalism in Twentieth-Century America.** Fall 1989. MR. LEVINE.

Starts with the "Lyrical Left" before World War I, but concentrates on the "Left" between the wars, the fate of that "Left" and the growth of a "New Left." Includes study of the Communist Party, various sorts of socialism, the "New York Intellectuals," the "Non-Stalinist Left," the shifting views of many radicals from criticism to support of the U.S. in the 1940s and 1950s. Growth of a new sort of radicalism during the Civil Rights Movement and the anti-Vietnam War Movement.

331. A History of Women's Voices in America. Spring 1990. MS. MCMAHON.

An examination of women's voices in American history: private letters, journals, and autobiographies; short stories and novels; advice literature; essays and addresses. Research topics focus on the content and form of the writing as it illuminates women's responses to their historical situation.

Prerequisite: **History 246** or **248** or consent of the instructor.

332. Community in America, 1600-1900. Fall 1988. MS. MCMAHON.

An examination of the ideals of community in American history and the social, economic, and cultural realities of community experience, searching for both change and continuity from the seventeenth through the nineteenth centuries. We will study the formation of new communities on a frontier that begins along the Atlantic seaboard and then moves westward across the continent; the attempts to create alternative communities either separate from, or contained within, established communities; and the changing face of community that accompanied expansion, urbanization, and suburbanization.

[333. The United States and Asia since 1850.]

334. **Research in 20th Century Afro-American History.** Fall 1988. MR. LEVINE.

Bowdoin has recently acquired extensive source collections on this subject: papers of the Congress of Racial Equality of the Student Non-Violent Co-ordinating Committee, White House Central Files of Civil Rights during the Kennedy and Johnson Administration, F.B.I. surveillance records, and much more. This seminar will involve research centering on this material. Prerequisites: any course in 20th century U.S. history. Preference will be given to students with previous background in Afro-American history. (Same as **Afro-American Studies 334.**)

- †335. **The Afro-American Critique of America.** Spring 1989. MR. STAKEMAN.

Afro-Americans have had to confront American racism for three centuries. Their perceptions of America, the "Negro problem," and strategies for the improvement of black life have spanned the radical/liberal/conservative political spectrum. This course will ask students to read and analyze the writings of black intellectual activists including black abolitionists (Frederick Douglass), black progressives (Booker T. Washington, W. E. B. Du Bois, Marcus Garvey), literary activists (James Weldon Johnson, Langston Hughes, Zora Neale Hurston), civil rights era activists (Martin Luther King, Malcolm X, the Black Panther Party), and post-civil rights theorists (Manning Marable and Thomas Sowell).

Problems in Latin American History.

350. **Latin American Revolutions.** Spring 1989. MR. WELLS.

This course will examine revolutionary and counter-revolutionary change in Latin America during the twentieth century, concentrating on two cases of successful revolutionary institutionalization, Cuba and Nicaragua, and one case of thwarted revolutionary action, Chile. We will challenge popular images and orthodox interpretations and test a variety of new propositions about these revolutionary processes. External and internal dimensions of each social movement will be analyzed, and each revolutionary process will be discussed in the full context of that country's historical development.

Problems in African History.

- †360. **Social Issues in African Literature.** Spring 1990. MR. STAKEMAN.

During the colonial and post-colonial periods, Africa developed an important, innovative, and varied literature that expresses the concerns of its authors in imaginative and often strikingly beautiful ways. An examination of this literature from the viewpoints of history, sociol-

ogy, and politics rather than that of literary analysis. Literary criticism as well as plays, poetry, short stories, and novels are read. This semester the course will focus on the images of women in African literature.

[362. History Workshop Problems Seminar.]

[363. Contemporary Problems in Contemporary Literature.]

Problems in Asian History.

†370. Problems in Chinese History. Every fall. MR. SMITH.

For advanced students. This course has two purposes: To survey the whole of Chinese history in order to synthesize the student's previous work in this area. To write a substantial research paper in an area of the student's choice. (Same as **Asian Studies 370.**)

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

451, 452. Honors Seminar. Every year. THE DEPARTMENT.

Independent Language Study

The study of languages for which regular course offerings are not available may be undertaken through a program of independent study. This program is available only to students who have a high motivation to pursue guided self-instruction in a language, who have demonstrated a high degree of competence in learning a language, and for whom the language undertaken is particularly relevant to academic or professional goals. The program allows students to begin a language and to achieve a mastery of its basics but does not offer instruction beyond the beginning level. Students who wish to go beyond this level are advised to seek more advanced instruction elsewhere during summer sessions or through exchange programs.

Responsibility for the Independent Language Study Program rests with the chairs of the Departments of German, Romance Languages, and Russian for the language which falls into the families of Germanic, Romance, or Slavic languages, respectively. Languages outside these categories may be arranged if a faculty member in any department can be found willing to accept responsibility under the criteria here outlined. Interested students who meet the criteria should consult the appropriate faculty member as early as possible prior to the semester in which the study of the language is to begin.

Interdisciplinary Courses

Interdisciplinary courses offer students an opportunity to consider topics of interest to several departments from their disciplinary perspectives. Inquiries about the relation of these courses to a major program should be addressed to the appropriate department.

†**Afro-American Studies 51. Myth and Heroic Epic of Africa.** Spring 1989. MR. HODGE.

See pages 94-95.

German 52. Myth and Heroic Epic of Europe. Spring 1990. MR. HODGE.

See page 157.

History 220. The British Experience. Fall 1988. MR. HOWELL.

See page 169.

Women's Studies 101. Introduction to Women's Studies. Spring 1989.

MS. HUNSINGER AND MS. PASSARIELLO.

See page 244.

Interdisciplinary Majors

A student may, with the approval of the departments concerned and the Recording Committee, design an interdisciplinary major to meet an individual, cultural, or professional objective.

Bowdoin has six interdisciplinary major programs that do not require the approval of the Recording Committee because the departments concerned have formalized their requirements. They are in art history and archaeology, art history and religion, chemical physics, English and english history, geology and physics, and mathematics and economics. A student wishing to pursue one of these majors needs the approval of the departments concerned.

Art History and Archaeology

Requirements:

1) **Art 101, 212, 222**, and one of **Art 302** through **388**; **Archaeology 101, 102**, and any three additional archaeology courses, at least one of which must be at the 300 level.

2) Any two art courses numbered 10 through 388.

3) One of the following: **Classics 51, 290** (Independent Study in Ancient History); **History 201**; **Philosophy 111**; **Religion 240**.

4) Either **Art 400** or **Classics 400** (Independent Study in Archaeology).

Art History and Religion

Requirements:

Art 101, 110; Religion 101, 102. It is strongly recommended that **Art History 101** and **Religion 101** be taken before the end of the sophomore year. **Art History 110** and **Religion 102** should also be taken as early as possible. No other introductory course (10-199) in either department will count toward the major. Three more courses at the intermediate or advanced level must be taken in each department. At least one, but not more than two, must be an independent study with an interdisciplinary emphasis.

Also required are four appropriately distributed courses outside of the art history and religion departments. Recommended are courses in studio art, philosophy of art, history, literature, or a science.

Within this frame-work the student will design his or her own major in consultation with an advisor from each department.

Chemical Physics

Requirements:

1) **Chemistry 101, 102, 251; Mathematics 161, 171, and 181 or 223; Physics 103, 227, 300.**

2) Either **Chemistry 252** or **Physics 310.**

3) Three courses from **Chemistry 252, 310, 330, 350, 401, 402; Physics 223, 229, 310, 320, 350, 451, 452.** At least two of these must be below the 400 level.

4) A working knowledge of computer language; this may be satisfied by **Computer Science 101, Mathematics 244,** or a demonstrated competence.

English and English History

Advisory Committee: PROFESSOR HOWELL (*History*) AND ASSOCIATE
PROFESSOR WATTERSON (*English*)

Requirements:

History 220 and two courses from **History 221, 222, 223; English 101, 102,** and a Shakespeare course (either **English 210, 211,** or a freshman seminar).

Four electives to be taken from offerings in the History and English departments or in a department where an appropriate course may be given. At least one of the electives must be an advanced seminar in either department or an honors project. Students undertaking an honors project must enroll in the **Honors Seminar (English/English History 451, 452).**

The combination of required courses and electives must be approved by the advisory committee on the basis that it reflects an appropriate concentration, either thematic or chronological.

Students in the major are encouraged to take advantage of approved study away opportunities. Course selection on study away programs must be approved by the advisory committee; in conjunction with the program, a limited number of places is reserved at King Alfred's College, Winchester.

English/English History, 451, 452. Honors Seminar. Every year. THE ADVISORY COMMITTEE.

Geology and Physics

Requirements:

- 1) **Chemistry 101, 102; Geology 101, 102, 241, 262; Mathematics 161, 171; Physics 103, 223, 227.**
- 2) Either **Physics 255** or **300.**
- 3) Two additional courses in geology and/or physics.

Mathematics and Economics

Requirements:

- 1) Seven or eight courses in mathematics as follows: **Mathematics 181;** either **Mathematics 222** and **Computer Science 101,** or **Mathematics 244** or **264; 225; 224; 249; 265;** either **223** or **263** or **304.**
- 2) Seven courses in economics as follows: **Economics 101, 102, 255, 256, 316,** and two electives numbered 200 or above. One elective may be an independent study in an appropriate topic. **Economics 257** may not be used as an elective.

Mathematics

PROFESSOR WARD, *Chair*; PROFESSORS GROBE AND JOHNSON;
ASSOCIATE PROFESSORS BARKER AND FISK; ASSISTANT PROFESSORS
ONG, ROBERTS, AND WOOD; TEACHING FELLOW ANDERSON

Requirements for the Major in Mathematics: A major consists of at least eight courses numbered 200 or above, including at least one of the following: **Mathematics 262, 263, 286,** or a course numbered in the 300s.

A student must submit a major program to the department at the time that he or she declares a major. That program should include courses in which the emphasis is primarily theoretical and courses in which applications are stressed. A student's major program may be changed later with the approval of the departmental adviser.

All majors should take basic courses in algebra (e.g., **Mathematics 222** or **262**) and in analysis (e.g., **Mathematics 223** or **263**). The department also encourages all majors to complete at least one sequence in a specific area of mathematics. Those areas are: algebra (**Mathematics 222, 262,** and **302**);

analysis (**Mathematics 243, 263, and 303**); applied mathematics (**Mathematics 224, 264, and 304**); probability and statistics (**Mathematics 225, 265, and 305**); and geometry/topology (**Mathematics 247, 286, and 287**). In exceptional circumstances, a student may substitute a quantitative course from another department for one of the eight mathematics courses required for the major. Such a substitution must be approved in advance by the department.

Majors who have demonstrated that they are capable of intensive advanced work are encouraged to undertake independent study projects. With the prior approval of the department, such a project counts toward the major requirement and may, in exceptional cases, lead to graduation with honors in mathematics.

Requirements for the Minor in Mathematics: A minor in mathematics consists of a minimum of four courses numbered 200 or above, at least one of which must be **Mathematics 243, 247**, or any Mathematics course numbered 262 or above.

Interdisciplinary Major: The department participates in an interdisciplinary program in mathematics and economics. See page 181.

Listed below are some of the courses recommended to students contemplating various options in mathematics.

For secondary-school teaching: **Computer Science 101, Mathematics 222, 225, 242, 247, 262, 263, 288, 289.**

For graduate study: **Mathematics 222, 223, 243, 262, 263, 286**, and at least one course numbered in the 300s.

For engineering, operations research, and applied mathematics: **Mathematics 223, 224, 225, 243, 244, 248, 249, 264, 265, 288, 304, 305.**

For mathematical economics and econometrics: **Mathematics 222, 223 or 263, 225, 244, 248, 249, 265, 288, 305**, and **Economics 316.**

For computer science: **Computer Science 101, Mathematics 222, 225, 228, 244, 248, 249, 262, 265, 288, 289.**

50. Topics in Mathematics. Every spring. MR. FISK.

This course is designed for students who wish to learn something about the spirit of modern mathematics and who do not plan to take other mathematics courses. The emphasis is on the history and origins of mathematical problems; the development of the ideas, language, and symbolism needed to deal with those problems; and the ramifications and applications of the theory to current quantitative problems in a variety of disciplines. Topics are chosen from geometry, number theory, probability, game theory and optimization, graph theory, topology, and computing.

60. Introduction to College Mathematics. Every fall. MR. JOHNSON.

Material selected from the following topics: combinatorics, proba-

bility, modern algebra, logic, linear programming, and computer programming. This course, followed by **Mathematics 161**, is intended as a one-year introduction to mathematics and is recommended for those students who intend to take only one year of college mathematics.

- 75. An Introduction to Statistics and Data Analysis.** Every other spring. Spring 1990. MRS. ROBERTS.

Students will learn to draw conclusions from data using exploratory data analysis and statistical techniques. Examples will be drawn primarily from the life sciences. The course will include topics from exploratory data analysis, the planning and design of experiments, the analysis of normal measurements, and non-parametric inference. The computer will be used extensively.

Open to students whose secondary school background has included at least three years of mathematics. Not open to students who have taken a college level statistics course (such as **Psychology 250** or **Economics 257**).

- 161. Differential and Integral Calculus I.** Every semester. MR. WOOD.

An introduction to limits; the derivatives of rational functions and roots of rational functions; the chain rule; the derivatives of the trigonometric functions; applications of the derivative to curve sketching; the Mean Value theorem; integration of algebraic functions; areas between curves.

Mathematics 161 may be taken as either a lecture or a self-paced course in the fall semester, but only as a self-paced course in the spring semester.

Open to students whose secondary school background has included at least three years of mathematics.

- 171. Differential and Integral Calculus II.** Every semester. THE DEPARTMENT.

Techniques of integration; the logarithmic and exponential functions; the inverse trigonometric functions; applications of the integral; improper integrals; series, including Taylor's theorem and differentiation and integration of power series.

Mathematics 171 may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 161** or equivalent.

- 172. Differential and Integral Calculus II, Advanced Section.** Every fall. MR. WARD.

Improper integrals; L'Hôpital's Rule; sequences and series; Taylor's theorem and power series; complex numbers; separable differential

equations; first and second order constant coefficient linear differential equations; applications.

Open to students whose backgrounds include the equivalent of **Mathematics 161** and the first half of **Mathematics 171**.

181. Multivariate Calculus with Linear Algebra. Every semester. THE DEPARTMENT.

Multivariate calculus in two and three dimensions, and an introduction to linear algebra. The calculus topics include: vector geometry and the calculus of curves; differentiation; the partial derivatives of real-valued functions, the gradient, directional derivatives, approximations using the tangent plane, and applications to extremal problems; multiple integration in two and three dimensions. The linear algebra topics include: an introduction to vector spaces, with an emphasis on \mathbb{R}^n , and the concept of dimension. Matrix algebra and Gaussian elimination are covered as time permits. Applications from the physical and the social sciences are discussed as time permits.

Mathematics 181 may be taken as either a lecture or a self-paced course.

Prerequisite: **Mathematics 171** or equivalent.

205. Applied Multivariate Statistics. Fall 1988. MR. FISK.

An introduction to the techniques of applied multivariate analysis based on matrix algebra and the multivariate normal distribution. Techniques to be discussed may include discriminant analysis, principal components, factor analysis, canonical correlations, multidimensional scaling, classification trees, and graphic techniques. These techniques are useful in many disciplines such as biology, psychology, and sociology. Students will learn how to run and interpret the output from SPSS, BMDP, S, and other statistical packages.

Prerequisites: **Mathematics 181** and a college-level statistics course.

222. Vector Geometry and Linear Algebra. Every year in alternate semesters. Fall 1988. MR. GROBE.

Topics include vectors, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors, and quadratic forms. Applications to linear equations, conics, quadric surfaces, and n -dimensional geometry.

Prerequisite: **Mathematics 181** or consent of the instructor.

223. Calculus of Vector Functions. Every year in alternate semesters. Spring 1989. THE DEPARTMENT.

The basic concepts of multivariate and vector calculus. Topics include continuity; the derivative as best affine approximation; the chain rule; Taylor's theorem and applications to optimization; La-

grange multipliers; multiple integration and change of variables; line and surface integration; gradient, divergence, and curl; conservative and solenoidal vector fields; theorems of Green, Gauss, and Stokes. Applications from economics and the physical sciences are discussed as time permits.

Prerequisite: **Mathematics 181**.

- 224. Applied Mathematics I.** Every year in alternate semesters. Spring 1989. MR. ONG.

An introduction to the theory of ordinary differential equations with diverse applications to problems arising in the natural and social sciences. Emphasis is placed upon the rigorous development of the different methods of solution. Topics include first-, second-, and higher-order equations with applications in qualitative stability and oscillation theory, Laplace transforms, series solutions, and the existence and uniqueness theorems. A few numerical methods sporadically introduced during the course. Knowledge of BASIC, FORTRAN, or PASCAL is helpful.

Prerequisite: **Mathematics 181** or concurrent registration in **181**.

- 225. Probability.** Every fall. MR. WOOD.

A study of the mathematical models used to formalize non-deterministic or "chance" phenomena. General topics include combinatorial models, probability spaces, conditional probability, discrete and continuous random variables, independence and expected values. Specific probability densities such as the binomial, Poisson, exponential, and normal will be discussed in depth.

Prerequisite: **Mathematics 181**.

- 228. Discrete Mathematical Structures.** Every spring. MR. WARD.

An introduction to logic, reasoning, and the discrete mathematical structures which are important in computer science. Topics include propositional logic, types of proof, induction and recursion, sets, counting, functions and relations, graphs, and program correctness.

Prerequisite: Any mathematics course numbered 60 or above, or consent of the instructor.

- 242. Number Theory.** Every other fall. Fall 1988. MR. WARD.

A standard course in elementary number theory which traces the historical development and includes the major contributions of Euclid, Fermat, Euler, Gauss, and Dirichlet. Prime numbers, factorization, and number-theoretic functions. Perfect numbers and Mersenne primes. Fermat's theorem and its consequences. Congruences and the law of quadratic reciprocity. The problem of unique factorization in various number systems. Integer solutions to algebraic equations. Primes in

arithmetic progressions. An effort is made to collect along the way a list of unsolved problems.

- 243. Functions of a Complex Variable.** Every other fall. Fall 1989. MR. GROBE.

The differential and integral calculus of functions of a complex variable. Cauchy's theorem and Cauchy's integral formula, power series, singularities, Taylor's theorem, Laurent's theorem, and the residue calculus, harmonic functions, and conformal mapping.

Prerequisite: **Mathematics 181** or consent of the instructor.

- 244. Numerical Analysis.** Every other year in alternate semesters. Spring 1990. THE DEPARTMENT.

An introduction to the numerical solutions of mathematical problems. Topics include computational aspects of linear algebra, approximation theory, numerical differentiation and integration, and numerical methods for differential equations. Students are required to develop computer software for the topics covered; therefore, previous exposure to computer programming is useful. An extra hour of instruction in FORTRAN will be scheduled each week for students without prior exposure to this programming language.

Prerequisite: **Mathematics 181, 222**, or consent of the instructor.

- 247. Geometry.** Every other fall. Fall 1989. MR. WOOD.

A survey of classical Euclidean and non-Euclidean geometry. Neutral geometry: the common ground of both Euclidean and non-Euclidean geometry. Parallel postulates. Detailed study of hyperbolic geometry: defect of the angle sum of a triangle, divergent and asymptotic parallels, horocycles, Poincare model of the hyperbolic plane. Elliptic geometry.

Prerequisite: **Mathematics 181** or consent of the instructor.

- 248. Nonnumeric Algorithms.** Spring 1989. MR. FISK.

The mathematical theory of nonnumeric algorithms. Sorting and searching, worst case analysis of algorithms, graph theory algorithms, and algorithms for parallel computers. Students are required to program and run short computer programs.

Prerequisite: **Mathematics 181, Computer Science 100**, or consent of the instructor.

- 249. Linear Programming and Optimization.** Every other fall. Fall 1988. MR. JOHNSON.

A survey of some of the mathematical techniques for optimizing various quantities, many of which arise naturally in economics and, more generally, in competitive situations. Production problems, resource allocation problems, transportation problems, and the theory of

network flows. Game theory and strategies for matrix games. The emphasis is on convex and linear programming methods, but other non-linear optimization techniques are presented. The course includes computer demonstrations of many of the techniques that are discussed.

Prerequisite: **Mathematics 181**.

- 262. Introduction to Algebraic Structures.** Every year in alternate semesters. Spring, 1989. MR. WARD.

A study of the basic arithmetic and algebraic structure of the common number systems, polynomials, and matrices. Axioms for groups, rings, and fields, and an investigation into general abstract systems which satisfy certain arithmetic axioms. Properties of mappings which preserve algebraic structure.

Prerequisite: **Mathematics 222**, or **Mathematics 181** and consent of the instructor.

- 263. Introduction to Analysis.** Every year in alternate semesters. Fall 1988. MR. BARKER.

An introduction to the theory of functions of one real variable. A major goal is the rigorous development of the foundations of calculus. Topics include the completeness and topological properties of the real numbers, metric spaces, sequences, continuity, uniform continuity, differentiability, and Riemann integration. Additional topics may be chosen from the following: series convergence, uniform convergence, Taylor series, and properties of transcendental functions. The course also serves as an introduction to rigorous mathematical proof.

Prerequisite: **Mathematics 171**.

- 264. Applied Mathematics II.** Every other spring. Spring 1990. MR. ONG.

A continuation of **Mathematics 224**. Topics include the applications of linear algebra and vector analysis to the solutions of systems of first-order linear differential equations, stability of linear systems, Green's functions and inhomogeneous equations, non-linear equations with emphasis on stability of equilibria, perturbation theory, and a few numerical methods. Knowledge of a programming language is helpful.

Prerequisite: **Mathematics 224**.

- 265. Statistics.** Every spring. Spring 1989. MR. FISK.

An introduction to the fundamentals of mathematical statistics. General topics include likelihood methods, point and interval estimation, and tests of significance. Applications include inference about binomial, Poisson, exponential models, frequency data, and analysis of normal measurements.

Prerequisite: **Mathematics 181** and **225**.

- [279. History of Modern Mathematics.]**

286. Topology. Every other spring. Spring 1989. MR. WOOD.

An introduction to both point-set and geometric topology centered on the fundamental notion of topological space and continuous function. Topics include fundamentals of point-set topology with special emphasis on homeomorphisms, compactness, connectedness, and separation. Geometric applications include fixed point theorems, surfaces, covering spaces, the Jordan curve theorem, and an introduction to knots and links.

Prerequisite: **Mathematics 263** or consent of the instructor.

287. Advanced Topics in Geometry. Every other spring. Spring 1990. MR. WOOD.

One or more selected topics from classical geometry, algebraic geometry, or differential geometry. The spring 1988 course focuses on Klein's Erlanger Programme for studying geometry via transformation groups. Particular attention given to the relationship between curvature and the defect of the angle sum of a triangle in non-Euclidian geometry. Solid hyperbolic geometry and its relationship to conformal geometry.

Prerequisites will depend on the topics, but usually include **Mathematics 247** or **223** or consent of the instructor.

288. Combinatorics and Graph Theory. Every other spring. Spring 1989. MR. FISK.

An introduction to combinatorics and graph theory. Topics to be covered may include enumeration, matching theory, generating functions, and partially ordered sets. Applications cover Latin squares, designs, computer science, and graph algorithms.

Prerequisite: **Mathematics 171**.

289. Topics in Set Theory and the Foundations of Mathematics. Every other fall. Fall 1989. MR. JOHNSON.

One or more topics selected from the general area of set theory, logic, and the foundations of mathematics. Recent courses have dealt with logic and computability theory, formal language theory, countability and diagonalization, Turing machines and various kinds of computability, recursive functions, Hilbert's Tenth Problem, undecidability, and incompleteness.

Prerequisite: At least two years of college mathematics or consent of the instructor.

302. Advanced Topics in Algebra. Every other spring. Spring 1990. MR. WARD.

One or more specialized topics from abstract algebra and its applications.

Prerequisite: **Mathematics 262**, or **Mathematics 222** and consent of the instructor.

303. Advanced Topics in Analysis. Every other spring. Spring 1989. MR. BARKER.

One or more selected topics from analysis. Topics may be chosen from Lebesgue integration, general measure and integration theory, Fourier analysis, Hilbert and Banach space theory, and spectral theory.

Prerequisite: **Mathematics 262**.

304. Advanced Topics in Applied Mathematics. Every other fall. Fall 1988. MR. ONG.

One or more selected topics in applied mathematics. Material selected from the following: Fourier series, partial differential equations, integral equations, calculus of variations, bifurcation theory, asymptotic analysis, applied functional analysis, and topics in mathematical physics.

Prerequisite: **Mathematics 264**.

305. Advanced Topics in Probability and Statistics. Every other fall. Fall 1989. MRS. ROBERTS:

One or more specialized topics from probability and statistics. The fall 1989 course focuses on regression analysis, dealing with both the theoretical and the practical aspects of normal linear models. Emphasis on the mathematical derivation of the distribution theory. Includes some interesting applications of linear algebra. (The course should complement material covered in **Economics 316**.)

Prerequisites: **Mathematics 222** and **265** or consent of the instructor.

[306. Advanced Topics in Topology.]

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Music

ASSOCIATE PROFESSOR GREENLEE, *Chair*; PROFESSOR SCHWARTZ;
ASSISTANT PROFESSORS MCCALLA AND MUNN; VISITING ASSISTANT
PROFESSOR YANG; GERALD F. MCGEE, *Director of Chorale*

Requirements for the Major in Music: **Music 101, 102, 201, 202; Music 301, 302**; one "topics" course (either **Music 351** or **361**), one year of individual performance studies, and two elective courses in music.

Requirements for the Minor in Music: **Music 50, 101, 102**, and two additional semester courses in music.

All students majoring or minoring in music are expected to participate in at least one regularly rehearsing departmental ensemble for at least one year.

10. Music, Narrative, and Characterization. Spring 1989. MR. MCCALLA.

Music is commonly thought to be capable of telling stories, depicting scenes, and painting human characters. This freshman seminar will examine the ways in which music—primarily Western “classical” music—does this, through comparisons of certain texts and the music which sets them, and through consideration of music which seems somehow dramatic or narrative, but which has no text or pre-existing program. Emphasis in the course will be on close and repeated listenings to the works under discussion.

50. Introduction to Music. Fall 1988. MR. SCHWARTZ.

For students with little or no previous training in music. Ability to read music or to play an instrument is not necessary. The essentials of music—sound and time—are studied as they have been used in different periods and in the context of musical forms. Listening materials are drawn from a variety of sources: early Western music, Western music from the Baroque through Romantic eras, and twentieth-century music.

The sequence **Music 101, 50** is recommended for the student desiring a broad, comprehensive introduction to the field of music.

58. Introduction to German Opera. Spring 1989. MESSRS. BECKWITH AND CERF.

A survey of representative German operatic masterpieces from 1791 to 1905. The gradual development of a distinctly German character in a genre founded and dominated by Italian culture. The course will trace the creation of a national operatic style beginning with Mozart's fusion of Italian melody, German polyphony, and folk dramaturgy in *The Magic Flute* and will conclude with the quasi-Freudian expressionism found in Richard Strauss' *Salome*. Other works to be examined will be Beethoven's *Fidelio*, Weber's *Der Freischütz*, and Wagner's *Lohengrin*. Neither the ability to read music nor any knowledge of German is required. No prerequisite.

60. The Traditional Music of China. Fall 1988. MR. YANG.

This course will begin with an investigation of issues involved in the study of Asian art and culture and will then proceed to study Chinese music history. During the course we will discuss various topics, such as music as a reflection mythology and ritual, notation and performance practice, music theory, interactions with Western culture, and different musical genres for theater, courts, and religious ceremonies.

101. Theory I: Fundamentals of Music Theory. Fall 1988. MS. MUNN.

For students with little or no previous training in music. A study of the organizational principles inherent in various pitch systems (scales, modes) and rhythmic systems, with emphasis on the notation of these in written symbols. Such concepts as tonality, transposition, modulation, basic harmonic motion, and simpler forms introduced. Aural dictation, keyboard applications, and development of fluency in notation are stressed.

102. Theory II: Theory and Analysis of Music from Bach through Wagner. Spring 1989. MR. MCCALLA.

Harmony and analysis, primarily of eighteenth- and nineteenth-century music. Ear training, dictation, and fluency in notation are stressed. There are three class hours plus two laboratory hours weekly.

Prerequisite: **Music 101** or equivalent.

122. Electronic Music: Techniques and Composition. Spring 1989. MS. MUNN.

An introduction to the use of devices for electronic sound generation, processing, and recording to produce compositions for electronic tape and live electronics. Basic principles of acoustics and a short history of the medium are covered. Individual lab time is required. A concert of student works is anticipated. Enrollment by permission of the instructor and limited to ten students.

124. Interdisciplinary Studies: Topics to be Announced. Spring 1990.

131, 132. Topics in Music History and Literature.

Music 131 and **132** are topics courses in specific aspects of music history and literature, designed for students with little or no background in music. Course titles and content may change every semester.

131. The Music of George Gershwin. Fall 1988. MR. MCCALLA.

A study of the music of George Gershwin, from his individual show tunes through selected Broadway and Hollywood musicals, the classically oriented instrumental compositions, and the opera *Porgy and Bess*. The emphasis will be two-fold: on Gershwin's music *per se*; and on its contemporary context, both American popular music (ragtime, jazz, other musicals) and American and European classical music (e.g., Aaron Copland, Roger Sessions, Maurice Ravel). No prerequisite.

132. Confrontation and Integration: Musical Encounters Between Europe and the Far East. Spring 1989. MR. YANG.

This course will be a survey of the interaction between two musical cultures, and also serve as an introduction to theoretical

ethnomusicology. The Far Eastern musics studied will include Japan, China, and at least one other culture. In examining the impact of the encounter between "East" and "West," and their mutual influences, we will study works by various composers from both traditions.

Prerequisite: **Music 50, Music 101**, or consent of the instructor.

201. Theory III: Theory and Analysis of Late Chromatic and Twentieth-Century Music. Fall 1988. MR. MCCALLA.

Study and formal analysis of styles representing the late nineteenth and twentieth centuries, including compositions by Debussy, Ives, Mahler, Schoenberg, Hindemith, Webern, and more recent music.

Prerequisite: **Music 102**.

202. Theory IV: Counterpoint and Orchestration. Spring 1989. MR. YANG.

An intensive study of instruments, both singly and in combinations, from the standpoint of composition and transcription, including analysis of chamber and orchestral scores. Practice in contrapuntal composition and analysis of polyphonic music in the sixteenth-, eighteenth-, and twentieth-century styles.

Prerequisite: **Music 201**.

301, 302. Topics in Music History.

Music 301 and **302** are intended primarily for music majors. **Music 101** and **102** are prerequisite or corequisite.

301. Music History, Gregorian Chant to 1750. Fall 1988. MR. GREENLEE.

302. Music History, 1750 to the Present. Spring 1989. MR. GREENLEE.

351. Topics in Music History: Performance Practice. Fall 1989. MR. GREENLEE.

The study of the process that transforms notation into music. Embellishment, tempo rubato, dynamic nuance, and other aspects of phrasing and improvisation discussed in historical perspective. Research projects may include the study of an early-music instrument or a public performance.

Prerequisite: **Music 102**.

361. Topics in Music Theory: The Origins of Common Practice. Spring 1990. MR. GREENLEE.

By the year 1750, the elements of common practice—the compositional method that served two centuries and is still the basis of most

popular music—were firmly established and had received extensive theoretical treatment. The course examines the development of the two basic elements of the practice: functional harmony and metrical rhythm.

Prerequisite: **Music 102.**

371. Composition. Fall 1988. MR. SCHWARTZ.

Free composition for piano, voice and instrumental ensemble, with the emphasis upon creative work in the more traditional forms (rondo, variation, etc.) and a variety of experimental techniques.

Performance Studies

Not more than six credits of individual performance and ensemble courses together may be taken for graduation credit. For administrative purposes, applied music and ensemble study will bear one of the course numbers 235 through 249, 251 through 288, depending on the number of semesters of such work the individual student has taken.

Instructors in 1986-1987 included Julia Adams (viola), Naydene Bowder (piano), Stefani Burk (oboe), Robert Charest (jazz piano), Ben Clinesmith ('cello), Kathleen Clinesmith (clarinet, saxophone), Judith Cornell (voice), William Eves (piano), Kathy Iovieno (flute), John Johnstone (guitar), Christopher Kane (guitar), Stephen Kecskemethy (violin), Margery Landis (horn), Dale Perkins (trumpet), Martin Perry (piano), Elizabeth Sollenberger (organ), Douglas Worthen (flute).

235-249. Individual Performance Studies. Every year.

The following provisions govern applied music:

1. Necessary for admission are two courses from the following: **Music 50, 51, 100, 101, 110, 111, 230, 231, and 282.** These may be taken concurrently with the first two semesters of performance studies (**Music 235, 236**).

2. Individual performance courses are intended for the continued study of an instrument with which the student is already familiar. Students may enroll only with the consent of the department. Students must take at least two consecutive semesters of study on the same instrument to receive any credit.

Admission is by audition only. Only students who are intermediate or beyond in the development of their skills are admitted.

At the end of the first year each student is critically reviewed by members of the department. Permission to continue is granted on the basis of seriousness of intent, attendance, rate of progress, etc.

At the end of the fourth semester each student is again reviewed

critically. Only exceptional students are granted permission to continue beyond this point. Musicianship, talent, and general stage of development are the important factors. The same applies to the end of the sixth semester. At the end of the sixth and eighth semesters a student is expected to present a formal public recital of at least forty-five minutes' duration.

During the first four semesters a student is expected to perform in public with reasonable frequency. The student may be called upon to play for the music faculty from time to time.

3. One half credit is granted for each semester of study. There must be two successive semesters of study on the same instrument.

4. The student pays a fee of \$200.00 for each semester of study; this fee is waived for music majors and minors. In some cases the student may have to travel off campus to receive instruction. Instruction is offered as available on orchestral and chamber instruments for which a significant body of written literature exists. Normally, instruction is available in flute, oboe, clarinet, bassoon, saxophone, trumpet, trombone, violin, viola, 'cello, harpsichord, organ, piano, guitar, and voice.

251-288. Ensemble Performance Studies. Every year.

The following provisions govern ensemble:

1. Ensemble music courses are intended to provide a student with experience in group music making. Students are admitted to an ensemble class only with the consent of the department and, for those enrolled in chamber ensembles, upon the formation of a specific chamber group.

2. One half credit is granted for each semester of study.

3. Ensembles will include at least the following: 251-258, chorale; 261-268, orchestra; 271-278, chamber choir; 281-288, chamber ensembles.

4. Grade will be credit or fail.

5. Ensembles meet regularly for a minimum of two hours weekly. Chamber ensembles are offered only as instruction is available.

6. Each ensemble will perform in public.

290. Intermediate Independent Study. THE DEPARTMENT.

400. Advanced Independent Study and Honors. THE DEPARTMENT.

Neuroscience

Administered by the Committee on Neuroscience

ASSOCIATE PROFESSOR ROSE, *Chair*

Requirements for the Major:

I. Core Courses:

A. Biology Courses

Biology 101: Introductory Cell Biology.

Biology 102: Biology of Organisms and Populations.

Biology 203: Comparative Neurobiology.

B. Psychobiology Courses

Psychobiology 265: Psychobiology.

Psychobiology 245: Neuropsychology *or*

Psychobiology 300: Psychopharmacology.

C. Psychology Courses

Psychology 101: Introduction to Psychology.

Psychology 270: Cognition *or*

Psychobiology 230: Perception.

D. Chemistry Courses

Chemistry 225: Elementary Organic Chemistry.

E. Statistics/Mathematics Courses

Psychology 250: Statistical Analysis *or*

Mathematics 70: Elementary Probability and Statistics.

II. Additional Courses Required

Two from the lists below at least one of which is in Biology:

A. Biology

113: Genetics.

114: Comparative Physiology.

116: Developmental Biology.

151: Ethology.

204: Biochemical Endocrinology.

261: Biochemistry.

304: Topics in Biochemistry and Molecular Biology.

B. Psychobiology

200: Comparative Psychology.

230: Perception.

245: Neuropsychology.

300: Psychopharmacology.

C. Psychology

- 220: **Atypical Child.**
- 260. **Abnormal Personality.**
- 270: **Cognition.**
- 310: **Clinical Psychology.**

III. Recommended Courses

- Physics 103: Mechanics and Matter.**
- Philosophy 225: The Nature of Scientific Thought.**
- Sociology 151: Sociology of Health and Illness.**

Philosophy

PROFESSOR CORISH, *Chair*; PROFESSOR MCGEE; RESEARCH PROFESSOR POLS;
ASSISTANT PROFESSOR COLEMAN; VISITING ASSISTANT PROFESSOR SIMON

Requirements for the Major in Philosophy: The major consists of eight courses, which must include **Philosophy 111, 112, and 200**, at least two other courses from the group numbered in the 200s and two from the group numbered in the 300s. The remaining course may be from any level.

Requirements for the Minor in Philosophy: The minor consists of four courses, which must include **Philosophy 111 and 112** and one course from the group numbered in the 200s. The fourth course may be from any level.

Freshman Seminars

Enrollment is limited to sixteen for each seminar; freshmen are given first preference for the available places; sophomores are given second preference; if there are any remaining places upperclassmen may be admitted with consent of the instructor.

Topics change from time to time but are restricted in scope and make no pretense at being an introduction to the whole field of philosophy. They are in all cases topics in which contemporary debate is lively and as yet unsettled and to which contributions are being made by more than one field of learning.

[10. Mind and Body.]

11. **Free Will.** Fall 1989 and Spring 1991. Ms. COLEMAN.

An examination of the question whether or not we have what has traditionally been called free will. Are our actions free, or at least partly free; or are they wholly caused, or determined, in some sense that makes the notion of freedom inappropriate in descriptions of actions? Today the question is often dealt with in terms of the related concept of moral responsibility. Are we really responsible agents as our tradition tells us

we are? This question then leads to a number of others. What do we mean when we say that people are responsible for their actions? Are the concepts of moral and legal responsibility of permanent human importance, or should they be replaced by concepts that are more suited to certain contemporary deterministic views of human nature? What role does reasoning play in human action? Can reasoning be understood in deterministic terms? Readings in contemporary and older materials are used as the basis for the seminar discussions.

13. Basic Problems in Philosophy. Fall 1988. Ms. COLEMAN.

In this course students will develop and formulate their own views on some of the basic problems of philosophy: What *is* philosophy? Are moral values absolute or relative? What is the relation between morality and religion? Are there philosophical grounds that justify religious belief? What is knowledge and how do we attain it? Is there a "highest value" that gives human life its meaning? If so, what is it? The texts used in the course are not intended as material to be learned by rote but rather as a springboard from which students will articulate their own views, while at the same time introducing them to classic texts in philosophy that have shaped Western culture.

14. Literature as Philosophy. Spring 1990 and Fall 1991. MR. MCGEE.

After a presentation of the explicitly philosophical background of the literary works to be studied, the philosophic life-attitudes expressed in them are examined to determine their adequacy as philosophy and their relevance to conduct. The literature varies from time to time but always includes one major contemporary work and one major older work.

15. Self and Self-Knowledge. Fall 1988, Fall 1990, and Spring 1992. MR. CORISH.

What is the self? What knowledge do we have of the self? Is that knowledge similar to or different from our knowledge of the world about us—that is, is knowledge of the subject similar to or different from knowledge of an object? These and other questions (e.g., personal identity, the unconscious, emotion) are discussed. Readings range from ancient (Plato, Aristotle, Augustine) to modern (Hume, Kant, perhaps Freud, Jung, the Behaviorists).

16. Contemporary Moral Problems. Fall 1988. MR. SIMON.

Our society is rife with moral controversies. This course will examine a number of moral problems with two goals: 1) to encourage more systematic and analytic thinking about a number of complex and difficult moral issues; and 2) to raise questions concerning how to think about moral problems, that is, to examine how moral reasoning proceeds.

Each semester, the problems to be studied will be drawn from a list including: abortion, suicide, euthanasia, capital punishment, affirmative action, discrimination and equal opportunity, homosexuality, human rights and civil disobedience, creationism, sociobiology, and war and nuclear deterrence.

Introductory Courses

51. **Philosophy and Poetry.** Spring 1989. MR. CORISH.

A study of some recognized philosophical doctrines as they appear in poetry, e.g., the philosophical doctrines of Aquinas in the poetry of Dante, those of Duns Scotus in the poetry of Hopkins, the doctrine of metempsychosis in Wordsworth's *Intimations of Immortality*, Kantian doctrines in Coleridge, etc. Doctrines and poets considered may vary from year to year. We shall also discuss poetic techniques and expressions in philosophy, as, for example, in Parmenides and in Plato, and shall devote some considerable time to a philosophical discussion of the nature of poetry.

54. **Introduction to Logic and Language.** Fall 1990. MR. MCGEE.

An introduction to the liberal art of critical thinking. Examines the use of language, definition, induction, deduction, argument from analogy, and informal fallacies. Stresses the application of the principles of logic to the evaluation of contemporary social and political issues.

58. **Environmental Ethics.** Fall 1988, 1989, 1990. MR. SIMON.

The central issue in environmental ethics concerns what things in nature have moral standing and how conflicts of interest among them are to be resolved. This course will examine the ethical theories and assumptions that inform the debates over this issue and in general over how to treat the environment. Specific topics to be covered include: utilitarianism versus rights theory, the nature and justification of anthropocentrism, animal liberation and the rights of non-human sentient things, preservation of endangered species, the ethics of preserving the wilderness, the moral status of non-sentient living things, holism versus individualism, the land ethic, and attitudes towards land use.

III. **Major Philosophers of the West: Beginnings to Christianity.** Fall 1988 and 1989. MR. MCGEE.

The sources and prototypes of Western thought. Concentration on Plato and Aristotle, but some attention is given to the pre-Socratic philosophers who influenced them and to the Stoics and Epicureans. Medieval philosophy is more briefly considered, to show the interaction of Christianity and Greek thought.

- 112. Major Philosophers of the West: Renaissance to Idealism:** Spring 1989. MR. CORISH. Spring 1990. MR. MCGEE.

Some attention is given to the philosophic grounds of the scientific revolution and to the intellectual and moral response the new scientific view of the world evoked from the philosophers. Reading in five or six of the following: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

Prerequisite: **Philosophy 111.**

Intermediate Courses

- 200. Major Philosophers of the West: The Nineteenth Century.** Fall 1988, 1990, and 1992. MS. COLEMAN.

A study of tendencies in the nineteenth century that have had an important influence on contemporary thought: the situation of philosophy after Kant; the development of idealism through Fichte, Schelling, and Hegel; the decline and fall of reason from Hegel to Schopenhauer and Kierkegaard; dialectical materialism, utilitarianism, and the origins of positivism.

Prerequisite: **Philosophy 111 and 112.**

- 221. Ethics.** Fall 1988. MR. MCGEE. Spring 1990 and Spring 1992. MS. COLEMAN.

Various types of answers to the questions, What is right for me to do? What ought to be done? and What is the good for man? are traced to their philosophic bases in historical and contemporary sources. The justification these bases provide is critically discussed, and some possible meanings of statements used to answer questions in morals are made explicit and compared.

Prerequisite: **Philosophy 111 and 112**, or consent of the instructor.

- 222. Political Philosophy.** Fall 1989 and Fall 1991. MR. SIMON.

Examines some of the major issues and concepts in political philosophy including: political obligation and consent, freedom and coercion, justice, equality, and democracy. The readings taken from classical texts (Hobbes, Locke, Rousseau, Mill) as well as contemporary essays. Time permitting, additional readings focus on contemporary criticisms of liberalism.

Prerequisite: **Philosophy 111 and 112**, or consent of the department.

- 223. Logic and Formal Systems.** Spring 1990 and Spring 1992. MR. CORISH.

An introduction to the techniques and applications of twentieth-century deductive logic. After a consideration of the traditional

approach, including the syllogism, the following topics are taken up: propositions, truth-functions, quantification theory, predicates, relations, natural deduction, and the properties of formal systems (consistency, completeness, etc.). No background in mathematics is presupposed.

224. Pragmatism. Spring 1991. Ms. COLEMAN.

A study of the development of American pragmatism covering the works of Peirce, James, Dewey, and Rorty. Topics include pragmatic theories of truth, meaning, belief, and philosophical method.

Prerequisites: **Philosophy 111** and **112**, or consent of the instructor.

225. The Nature of Scientific Thought. Fall 1989 and Fall 1990. MR. CORISH.

A historical and methodological study of scientific thought as exemplified in the natural sciences. Against a historical background ranging from the beginnings of early modern science to the twentieth century, such topics as scientific inquiry, hypothesis, confirmation, scientific laws, theory, and theoretical reduction will be studied. The readings include such authors as Burt, Butterfield, Duhem, Hempel, Koyré, Kuhn, Nagel, Poincaré, Popper, Toulmin, as well as classical authors such as Galileo, Descartes, Newton, Berkeley, and Leibniz.

Prerequisite: **Philosophy 111** and **112**, or consent of the instructor.

226. On Love. Spring 1991. MR. MCGEE.

An examination of philosophic attempts to analyze and clarify the cluster of concepts signaled by terms such as "love," "friendship," "charity," "*agapē*," and "fellow-feeling." Readings drawn from some of the following authors: Plato, Aristotle, St. Paul, St. Thomas, Spinoza, Schopenhauer, Nietzsche, Freud, Ortega y Gasset, and C. S. Lewis.

Prerequisite: **Philosophy 111** and **112** or consent of the instructor.

228. Philosophy of Psychology. Ms. Coleman. Spring 1989.

Philosophy of psychology is the examination of metaphysical questions concerning the way in which mental phenomena fit into a total picture of reality and of the theoretical presuppositions of empirical research in psychology. Topics include: How are mental functions related to brain states? Is perception of external objects direct or indirect? Do reasons, beliefs, desires, and purposes ever cause actions? Are all actions selfish? What is a concept? Is it an image, a set of procedures, or a list of features?

Prerequisites: **Philosophy 111** and **112**, or consent of the instructor.

229. Philosophy of Art. Fall 1989 and Fall 1991. Ms. COLEMAN.

A comparative study of the nature of meaning in poetry, music, and

the visual arts. Focuses on selected major works in these three fields and, in this concrete setting, the relations between meaning and the expressive and productive (or creative) aspects of art are explored.

Prerequisite: **Philosophy 111** and **112**, or consent of the instructor.

230. Philosophy of the Social Sciences. Fall 1990. MR. SIMON.

The central issue in the philosophy of the social sciences concerns the nature and status of the social sciences, especially in relation to the natural sciences. When we study human beings, what kind of knowledge can we have, what methods should we use to acquire this knowledge, and of what use is this knowledge? This course will focus on these questions and a set of related topics including: three perspectives on the social sciences (naturalistic, interpretive, critical), the problem of crosscultural rationality, explanation, objectivity and the status of values, and methodological individualism versus holism.

Prerequisites: **Philosophy 111** and **112**, or consent of instructor.

235. Philosophy of Technology. Spring 1989 and Spring 1991. MR. SIMON.

The development of modern technology is perhaps the most crucial factor shaping life in the twentieth century. Much of our present environmental crisis is a direct result of our technological explosion. The growth, use and abuse of technology and our increasing reliance on it raise a number of philosophical questions that are neither fully appreciated nor understood. This course will explore various of these questions including: the nature and growth of technology as a mode of addressing problems of the human condition, technology as a form of human expression and its relation to nature, views of technology as liberating versus views of technology as imprisoning, and ethical and political problems raised by questions of the control and misuse of various technologies. (Same as **Environmental Studies 235**.)

Prerequisites: **Philosophy 111** and **112** or consent of instructor.

Advanced Courses

Although courses numbered in the 300s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides the stated prerequisite, **Philosophy 111** and **112**, at least one of the courses from the group numbered in the 200s will also be found a helpful preparation.

300. Marx. Spring 1990. MR. SIMON.

Examines the thought of Karl Marx. The primary readings will be from Marx's major writings. Topics covered include: Marx's methodology and philosophical anthropology, alienation, exploitation, historical

materialism, the theory of class and politics, and ideology. The last part of the course deals with contemporary normative debates between defenders of capitalism and communism.

Prerequisite: **Philosophy 111** and **112**, or consent of the instructor.

331. Plato and Platonism. Fall 1989. MR. CORISH.

A study of some of the principal dialogues of Plato, drawn chiefly from his middle and later periods, followed by a study of selected material from the later history of Platonism. The instructor will select the dialogues that will be read, but topics to be studied in later Platonism and Neoplatonism will depend on the particular interests of the students.

Prerequisite: **Philosophy 111** and **112**.

[332. The Analytic Movement.]

[333. Wittgenstein.]

334. Topics in Medieval Philosophy. Fall 1988 and Fall 1991. MR. CORISH.

An examination of some fundamental medieval views concerning man and his environment. Special attention will be paid to the Aristotelian world view as made over to Christian specifications, and to its decline in favor of the modern scientific view of man and the world.

Prerequisite: **Philosophy 111** and **112**.

335. The Philosophy of Aristotle. Spring 1990. MR. CORISH.

A textual study of the basics of Aristotle's philosophy. Aristotle's relationship to Plato, his criticism of the Platonic doctrine of Forms, and Aristotle's own doctrines of substance, causation, actuality, potentiality, form, and matter are discussed. Some of the Aristotelian disciplines of logic, physics, metaphysics, psychology, and political and moral philosophy are examined in terms of detailed specific doctrines, such as that of kinds of being, the highest being, the soul, virtue, the state. Ends with a discussion of Aristotle's views of systematic research and his influence on subsequent thought.

Prerequisite: **Philosophy 111** and **112**.

[336. Spinoza's Ethics.]

337. Hume. Spring 1989 and Spring 1991. MS. COLEMAN.

A critical examination of the meaning and extent of Hume's scepticism, covering his epistemology and metaphysics, moral and political philosophy, and philosophy of religion.

Prerequisites: **Philosophy 111** and **112**, or consent of the instructor.

338. **Kant.** Spring 1990. Ms. COLEMAN.

The Critique of Pure Reason is one of the preeminent works in the Western tradition, a rival of Plato's *Republic* and Aristotle's *Metaphysics*. It also has the unfortunate and undeserved reputation of being tortuously difficult. We shall read the book in an attempt to appreciate both its greatness and its difficulty. The primary task will be to understand Kant's project of providing a secure foundation for knowledge. We shall also consider those features of the book that caused such excitement among German Romantics and Idealists in the generation after Kant, as well as those features that have found favor in the twentieth century. The course will be a mixture of presentation and discussion.

Prerequisites: **Philosophy 111** and **112**, or consent of the instructor.

339. **Santayana.** Fall 1989 and Fall 1991. MR. MCGEE.

A detailed study of *Scepticism and Animal Faith* and of the one-volume edition of *Realms of Being*.

Prerequisites: **Philosophy 111** and **112**, or consent of the instructor.

340. **Contemporary Ethical Theory.** Spring 1989 and Spring 1991. MR. SIMON.

Important recent debates in ethics have called into question the nature and status of traditional ethical theories and the very nature of morality itself. This course will examine some of these debates through the writings of major contemporary theorists including Williams, MacIntyre, Nagel, and Rawls.

Prerequisites: **Philosophy 111** and **112** or consent of the instructor.

290. **Intermediate Independent Study.** THE DEPARTMENT.

400. **Advanced Independent Study and Honors.** THE DEPARTMENT.

Physics and Astronomy

PROFESSOR EMERY, *Chair*; PROFESSORS HUGHES AND LACASCE
ASSOCIATE PROFESSOR TURNER; ASSISTANT PROFESSOR SYPHERS;
TEACHING ASSOCIATE ROBERTS; RESEARCH ASSOCIATE CHONACKY

Requirements for the Major in Physics: The major program in physics depends to some extent on the student's goals. These goals should be discussed with the department. Those who intend to do graduate work in physics should plan to do an honors project. For those considering a program in engineering, consult pages 90-91. A major student with an interest in an interdisciplinary area such as geophysics, biophysics, or oceanography will choose appropriate courses in related departments. Secondary school teaching requires a broad base in science courses as well as the necessary

courses for teacher certification. For a career in industrial management, some courses in economics and government should be included.

In any case, a major in physics is expected to complete **Mathematics 161, 171, Physics 103, 223, 227, 228**, and four more approved courses, one of which may be **Mathematics 181** or above. In addition a major is expected to have a working knowledge of a computer language. This requirement can be satisfied by **Computational Physics 250, Computer Science 101, or Mathematics 244**, or by demonstrated competence. For honors work a student is expected to complete **Mathematics 181 or 223 and Physics 103, 223, 227, 228, 300, 310, 450**, and four more courses, one of which may be in mathematics above **181**. Students interested in interdisciplinary work may, with permission, substitute from other departments.

Requirements for the Minor in Physics: At least four courses numbered **103** or higher, at least one of which is from the set of **Physics 223, 227, and 228**.

Interdisciplinary Majors: The department participates in interdisciplinary programs in chemical physics and geology and physics. See pages 180 and 181.

Core Courses

- 103. Mechanics and Matter.** Every semester. Fall 1988. MR. EMERY. Spring 1989. MR. SYPHERS.

The basic concepts and laws of classical mechanics with special emphasis on the conservation laws of momentum, energy, and angular momentum. Particle dynamics, including the motions of particles in gravitational, electric, and magnetic fields. A brief introduction to kinetic theory and special relativity. Three hours of laboratory work a week.

Prerequisite: Previous credit or concurrent registration in **Mathematics 161**. Enrollment is limited to students without credit for or concurrent registration in **Chemistry 251**. Open only to freshmen and sophomores in the fall.

- 223. Electric Fields and Circuits.** Every spring. MR. TURNER.

The basic phenomena of the electromagnetic interaction are introduced. The basic relations are then specialized for a more detailed study of linear network theory. Laboratory work stresses the fundamentals of electronic instrumentation and measurement. Three hours of laboratory work a week.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

- 227. Waves and Quanta.** Every fall. MR. LACASCE.

Wave motion occurs in many areas of physics. A discussion of basic

wave behavior and the principle of superposition leads to a study of wave propagation and its relationship to coherence, interference, and diffraction. The wave model of the atom provides an introduction to atomic spectra. The laboratory work provides experience with optical methods and instruments.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

228. Modern Physics. Every spring. MR. EMERY.

An introduction to the basic concepts and laws of nuclear and particle physics, covering the principles of relativity and quantum theory, particle accelerators, nuclear structure and reactions, and the behavior of elementary particles. The physics of radioactivity and the biological, medical, and ecological applications of radiation are given special emphasis through weekly laboratory exercises with radioactive materials and nuclear instrumentation. Three hours of laboratory work a week.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

229. Statistical Physics. Fall 1989.

Develops a framework capable of predicting the properties of systems with many particles. This framework, combined with simple atomic and molecular models, leads to an understanding of such concepts as entropy, absolute temperature, and the canonical distribution. Some probability theory will be developed as a mathematical tool.

Prerequisite: **Physics 103** and previous credit or concurrent registration in **Mathematics 171**, or consent of the instructor.

300. Methods of Theoretical Physics. Every spring. MR. LACASCE.

Mathematics is the language of physics. Similar mathematical techniques occur in different areas of physics. A physical situation may first be expressed in mathematical terms, usually in the form of a differential or integral equation. After the formal mathematical solution is obtained, the physical conditions determine the physically viable result. Examples are drawn from heat flow, gravitational fields, and electrostatic fields.

Prerequisite: **Mathematics 181** or **223**, and **Physics 223**, **227**, or **228**, or consent of the instructor.

310. Atomic Physics. Every fall. MR. SYPHERS.

An introduction to quantum theory, solutions of Schroedinger equations, and their applications to atomic systems.

Prerequisite: **Physics 227** and **300**.

- 320. Electromagnetic Theory.** Every other spring. Spring 1990. THE DEPARTMENT.

First the Maxwell relations are presented as a natural extension of basic experimental laws, then emphasis is given to the radiation and transmission of electromagnetic waves.

Prerequisite: **Physics 223** and **300**, or consent of the instructor.

- 350. Solid State Physics.** Every other spring. Spring 1989. MR. TURNER.

The physics of solids, including crystal structure, lattice vibrations, and energy band theory.

Prerequisite: **Physics 310**.

- 370. Advanced Mechanics.** Every other fall. Fall 1989. THE DEPARTMENT.

A thorough review of particle dynamics, followed by the development of Lagrange's and Hamilton's equations and their applications to rigid body motion and the oscillations of coupled systems.

Prerequisite: **Physics 300** or consent of the instructor.

- 450. Advanced Independent Study and Honors.** THE DEPARTMENT.

Programs of study for general relativity, the physics of thin films, biophysics, magnetic resonance, and low-temperature physics are available. Work done in these topics normally serves as the basis for an honors paper.

Prerequisite: **Physics 310**.

Adjunct Courses

- 62. Contemporary Astronomy.** Every spring. MR. HUGHES.

A generally qualitative discussion of the nature of stars and galaxies, stellar evolution, the origin of the solar system and its properties, and the principal cosmological theories. Enrollment in this course is limited to fifty students without credit or concurrent registration in **Physics 103**.

- 63. Physics of the Twentieth Century.** Every fall. MR. HUGHES.

Although the physics of the eighteenth and nineteenth centuries enjoyed many great successes, there was by the end of the nineteenth century a growing awareness of the limitations of what we now call classical physics. This course traces the discovery of those limitations and the rise of modern physics. Topics discussed include the development of quantum mechanics and relativity, the origin and growth of nuclear and elementary particle physics, the rise of electronics, and those aspects of technology which have had a special relationship with physics.

Prerequisite: Ordinary secondary school mathematics. Enrollment is limited to fifty students without credit for or concurrent registration in **Physics 103**.

240. Digital Electronics. Every other fall. Fall 1988. MR. TURNER.

An introduction to the basic principles of binary circuits and digital electronics. Topics include Boolean algebra and logic circuitry, binary numbers and computation, memory circuits and information storage, digital/analog conversion, and circuits for timing and control. The structure of digital instruments, calculators, and computers is covered as time permits. Laboratory work with digital integrated circuits.

Prerequisite: **Physics 103**.

250. Topics in Physics.

Fall 1989. **Computational Physics.** MR. ROBERTS.

Computer calculations complement and extend the methods of calculus in modeling physical systems. Designed to introduce a number of basic computational methods useful for problems in the physical sciences and to develop some facility in their use. Some prior experience programming computers or personal computers would be helpful, but is not required.

Prerequisites: **Physics 103**, **Mathematics 171**, previous credit or concurrent registration in a 200 level physics course, or consent of the instructor.

Spring 1989. **Physical Acoustics.** MR. LACASCE

An introduction to wave motion and wave propagation; the techniques and problems of physical acoustical measurements and their relation to the ear and hearing. Selected topics include noise and the control of noise, architectural acoustics, and normal modes.

Prerequisite: **Physics 103** and **Mathematics 161**.

255. Physical Oceanography. Spring 1990. MR. LACASCE.

The aim is to provide a feel for the scope of physical oceanography. Among the topics covered are tidal theory, surface and internal waves, and the heat budget and its relation to the oceanic circulation. Some attention is given to the problems of instrumentation and the techniques of measurement.

Prerequisites: **Physics 103** and **Mathematics 161**.

260. Biophysics. Every spring. MR. HUGHES.

An introduction including discussion of the effects of ionizing radiation on cells and tissues, the application of X-ray diffraction methods to biological problems, and other modern topics. Some attention is given to historical aspects of the subject and to the development of devices such as the electron microscope.

Prerequisites: **Physics 103**, **Chemistry 101**, **102**, and **Mathematics 171**.

262. Astrophysics. Every fall. MR. HUGHES.

A quantitative discussion which introduces the principal topics of central importance in astrophysics, including stellar structure and evolution, planetary physics, and cosmology.

Prerequisite: **Physics 103.**

290. Intermediate Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff. If the investigations concern the teaching of physics, this course may satisfy certain of the requirements for the Maine State Teacher's Certificate.

Prerequisite: Normally, a previous course at the 200 level.

400. Advanced Independent Study. THE DEPARTMENT.

Topics to be arranged by the student and the staff.

Prerequisite: Normally, a previous course at the 300 level.

Psychology

ASSOCIATE PROFESSOR HELD, *Chair*; ASSOCIATE PROFESSOR ROSE, *Director of the Psychobiology Program*; PROFESSOR FUCHS; ASSOCIATE PROFESSORS SCHAFFNER AND SMALL; ASSISTANT PROFESSOR JOHNSON

The Department of Psychology comprises two programs: Psychology and Psychobiology. Students may elect a major within the Psychology program or they may elect an interdisciplinary major in Neuroscience, sponsored jointly by the Psychobiology program and the Biology Department (see Neuroscience description, pages 195-196). The program in Psychology examines contemporary perspectives on principles of human behavior, in areas ranging from cognition, language, and neurophysiology to interpersonal relations, psychopathology, and problem solving. Its approach emphasizes scientific methods of inquiry and analysis. The program in Psychobiology examines the interrelations among biological, psychological, and environmental factors in the study of normal and abnormal behavior.

Requirements for the Major in Psychology: The Psychology program major includes a total of nine courses numbered 100 or above. These courses are selected by students with their advisors and are subject to departmental review. The nine courses include **Psychology 101**, **Psychology 250** (taken during the sophomore year if possible), and an advanced course numbered 300 or above. Two Psychology laboratory courses numbered 260-279 must be taken after statistics, and if possible, before the senior year. At least one laboratory course must be numbered 270-279. Majors are encouraged to consider independent study course on a library, laboratory, or field research project during the senior year. Any one or two of the following Psychobiology courses may count toward the nine-course requirement for the Psychology major: **210, 230, 245, 265, and 300.**

Requirements for the Minor in Psychology: The Psychology program minor consists of five courses numbered 100 or above, including **Psychology 101, Psychology 250**, and one Psychology laboratory course numbered 260-279. Any one of the following Psychobiology courses may be included in the Psychology minor: **210, 230, 245, 265, and 300**.

Requirements for the Major in Neuroscience: See Neuroscience description, pages 195-196.

Students who are interested in teaching as a career should consult with the Department of Education for courses to be included in their undergraduate program. Ordinarily, students of education will find much of relevance in **Psychology 52, 210, 270, 361**; these courses cover the topics usually included in educational psychology. In addition, prospective teachers may find **Psychology 211, 212, 220, and 271** compatible with their interests and helpful in their preparation for teaching.

Courses in Psychology

Freshman Seminar

- 10. Psychological Curiosity: Modeling Social Processes.** Every other year. Spring 1990. MR. SCHAFFNER.

Elementary concepts of model building and exploration. Topics and examples are drawn from many areas of psychology and the related social sciences. Frequent written exercises provide the basis for class study of several central models in the social sciences. Individual projects combining written and oral presentations of an original model complete the term. Computer modeling is introduced, but no prior computing experience is presumed.

Introductory Courses

- 52. Introduction to Language.** Spring 1990. MS. JOHNSON.

What is "language" and how is language related to other forms of human behavior? This course provides an introduction to these issues from the perspective of the social and behavioral sciences, especially psychology and linguistics. Topics to be covered include a comparison of "natural" human languages with other human and animal communication systems, similarities and differences among human languages (including spoken, signed, and written languages), bilingualism, effects and noneffects of language on thought and behavior, and historical change in languages (including the development of new languages).

Prerequisite: Some familiarity with a language other than English (the equivalent of study of a foreign language for at least one semester in college or one year in high school).

101. Introduction to Psychology. Every semester. THE DEPARTMENT.

A general introduction to the major concerns of contemporary psychology including psychobiology, perception, learning, cognition, language, development, personality, intelligence, abnormal and social behavior. Recommended for freshmen and sophomores.

Intermediate Courses**210. Developmental Psychology.** Every spring. Ms. JOHNSON.

A survey of major changes in psychological functioning from conception through adolescence. Several theoretical perspectives are used to consider how physical, personality, social, and cognitive changes jointly influence the developing child's interactions with the environment. An optional practicum with children may be available.

Prerequisite: **Psychology 101.**

211. Personality. Every fall. Ms. HELD.

A comparative survey of theoretical and empirical attempts to explain personality and its development. The relationships of psychoanalytic, interpersonal, humanistic, and behavioral approaches to current research are considered.

Prerequisite: **Psychology 101.**

212. Social Psychology. Every spring. MR. SCHAFFNER.

A survey of theory and research on psychological aspects of social behavior. Topics include conformity, language and communication, attitudes, prejudice and racism, social epistemology, decision making, interpersonal relationships, and group conflict. Class research projects supplement readings and lectures.

Prerequisite: **Psychology 101 or Sociology 101.**

220. Atypical Child. Every other year. Fall 1988. Ms. HELD.

A comparative understanding of theories and research concerning the etiology, development, diagnosis, and treatment of various forms of childhood exceptionality. A family systems perspective is emphasized.

Prerequisite: **Psychology 211 or 210.**

[221. Individual Differences.]**222. Law and Psychology.** Every other year. Spring 1989. Ms. HELD.

Presents topic areas where there is an interface between psychological and legal issues. The first emphasis is on how psychology can study and aid the legal process. The second emphasis assesses the special concerns of the mental health professional within the legal system. Limited to thirty students. No freshmen admitted.

Prerequisite: **Psychology 101.**

- 223. Political Psychology.** Every other year. Spring 1989. MR. SCHAFFNER.

An analysis of psychological aspects of political behavior, considering both prominent figures and the general public. Topics include the psychological foundations of politics; ideology and the structure of belief systems; activism and alienation; political socialization; power tactics; rationality of political choice; leadership; social change, and psychobiography.

Prerequisite: **Psychology 101**.

- 250. Statistical Analysis.** Every fall. MR. SCHAFFNER.

An introduction to the use of descriptive and inferential statistics in behavioral research. Weekly laboratory work in computerized data analysis. Required of majors no later than the junior year.

Prerequisite: **Psychology 101**, **Sociology 101**, or consent of the instructor.

- 260. Abnormal Personality.** Every Spring. MS. HELD.

A general survey of the nature, etiology, diagnosis, and treatment of common patterns of mental disorders. An optional, supervised practicum at a local psychiatric unit is available.

Prerequisite: **Psychology 211** and **250** or consent of the instructor.

- 270. Cognition.** Every spring. MRS. SMALL.

An analysis of research methodology and experimental investigations in cognition, which includes attention, memory, comprehension, thinking, and problem solving. Laboratory work, including experimental design.

Prerequisite: **Psychology 101** and **250**.

- 271. Language: A Developmental Perspective.** Every fall. MS. JOHNSON.

Major aspects of how we produce and understand language are considered by examining research and theory concerning how language develops in both normal and atypical populations and how early language is similar to or different from adult language. The class designs and executes an original research project.

Prerequisite: **Psychology 101** and **250**, or consent of instructor.

- 272. Research in Social Behavior.** Every other year. Fall 1990. MR. SCHAFFNER.

A laboratory course on research design and methodology in social and personality psychology, focusing on a topic of current theoretical importance. Students plan and carry out original research.

Prerequisite: **Psychology 211** or **212**, and **250**.

Advanced Courses**310. Clinical Psychology.** Every other year. Fall 1989. Ms. HELD.

The history and development of clinical psychology including an emphasis on current controversies regarding ethical and legal issues. Major portions of the course are devoted to theory and research concerning psychological assessment and types of psychotherapies.

Prerequisite: **Psychology 220** or **260**.

311. History of Psychology. Spring 1989. Ms. JOHNSON.

How psychology developed as a discipline, from the ancient Greeks to modern psychology. Focuses on how questions about psychology (including perception, cognition, language, social interaction, and personality) have changed as a function of the cultural context within which they were posed and the theoretical and methodological tools available at a given point in time.

Prerequisite: At least three intermediate or advanced courses in psychology (excluding **Psychology 250**), or consent of the instructor.

[312. Topics in Psychology.]**361. Cognitive Development.** Every fall. Mrs. SMALL.

The development of mental representation and cognitive processes from infancy to early adulthood. Emphasis on experimental research and related theories of cognitive development, especially on the development of perception, memory, learning, comprehension, thinking, and problem solving.

Prerequisite: **Psychology 250** and **Psychology 210** or **270**.

362. Infancy. Fall 1989. Ms. JOHNSON.

Major theories and research concerning development from conception through the second year of life. Topics covered include prenatal development, sensation and perception, motor skills, cognition and early communication, and social and personality development. Students read current research and design a research proposal on a topic of their choice.

Prerequisites: **Psychology 250** and **Psychology 210**, or consent of instructor.

290. Intermediate Independent Study. THE DEPARTMENT.**400. Advanced Independent Study and Honors.** THE DEPARTMENT.**Courses in Psychobiology****50. Mind and Brain: Historical and Contemporary Issues.** Every other fall. Fall 1988. MR. ROSE.

What are the influences now and in the past that determine an accepted view of the biological basis of "human nature"? This course examines the interaction of historical, philosophical, sociopolitical,

technological, and personal factors which preceded and led to modern views of our normal and abnormal behaviors. Contemporary issues include genetics and behavior; psychopharmacology; biology's role in defining aggression, crime, mental illness, and other problems; its role in determining social policy; and biological arguments in race and sex discrimination, as well as cross-cultural comparisons between Western and Eastern illness treatment systems (Asian medicine, acupuncture, shamanism, etc.).

60. Drugs, Behavior, and Human Society. Every other fall. Fall 1989. MR. ROSE.

An introductory survey of psychoactive drugs and plants, toxins, food additives, and other chemicals that alter human behavior as used in various cultures. Following a historical introduction and an overview of drug action mechanisms, each chemical group will be discussed from the following perspectives: history of use, specific modes of action, physical and psychological effects, reasons for use (religious, recreational, industrial, etc.), cultural influences, and potential hazards and treatments. Topics include: alcohol and other depressants, cocaine and other stimulants, psychedelics and hallucinogens, psychotherapeutics, medicinal plants, drugs and sports, drugs in food and food as drugs, environmental toxins, and contraceptives.

200. Comparative Psychology. Every other spring. Spring 1990. MR. ROSE.

An examination of current issues in the evolution and development of behavior in different species from the viewpoint of comparative psychology, emphasizing early experience, including learning, and its interaction with biological constraints on behavior. Topics include: behavioral development (nature-nurture controversy), critical periods, effects of early experience on neural mechanisms and behavior, courtship-mating-parenting, behavioral patterns and rhythms, sensory-perceptual systems, learning, motivation, emotion, and social behaviors in different species, including humans.

Prerequisite: **Psychology 101** or **Biology 101**.

230. Perception. Every other spring. Spring 1989. MR. ROSE.

A survey of the basic phenomena and problems of perception and sensory psychology. Topics include psychophysics; coding of qualities such as color, form, pitch, touch, pain; the influence of early experience, attention, individual differences, culture, and altered states of consciousness, and an examination of abnormal perceptions (dyslexia, aphasia, etc.), including their diagnosis and treatment.

Prerequisite: **Psychology 101**.

245. Neuropsychology. Every other spring. Spring 1989. MR. ROSE.

An in-depth survey of experimental and clinical approaches in the study of brain-behavior relationships of higher processes, in normal and brain damaged humans. Topics include: assessment of normal sensory-motor, attentional, memory, and language functions by behavioral and neurophysiological techniques, higher function changes during development and with aging, the sensory-motor and cognitive effects of damage to specific regions of the brain versus nonspecific, general brain damage, clinical studies as a cue to normal functions, and Asian versus Western approaches to structure and function of higher processes.

Prerequisite: **Psychology 101** or **Biology 101**.

265. Psychobiology. Every fall. Fall 1988. MR. ROSE.

A basic course on the biological correlates of behavior with special emphasis on the neurosciences. Topics include neurophysiology, psychopharmacology, perceptual systems, brain mechanisms in sleep and wakefulness, normal and abnormal emotional behaviors, learning, memory, and higher functions, as well as the neuropsychology of brain damaged individuals. Ethical and political implications of neuroscience are also discussed. Laboratory experience includes exposure to histological, neurosurgical, and physiological recording techniques in animals, but with the major emphasis on human electrophysiological recordings, to include central (EEG, evoked potentials), peripheral (EMG), and autonomic nervous system (EKG, etc.) measures, including biofeedback.

Prerequisite: **Psychology 101** or **Biology 101**.

300. Psychopharmacology. Every other spring. Spring 1990. MR. ROSE.

An advanced study of psychoactive drugs; their neural mechanisms of action, and their effect on animal and human behavior. Topics include experimental techniques in psychopharmacology, neuropharmacology, the role of neurotransmitters in appetitive behavior, learning, and memory; an in depth analysis of depressants, stimulants, narcotic analgesics, antipsychotics, and psychedelics; drug addiction and treatment; ethnopharmacology, emphasizing nontraditional or nonwestern medicinal/ritualistic use of organic and inorganic substances; and implications of drug effects for neurochemical theories of behavior.

Prerequisite: **Psychobiology 265**, **Biology 114**, or **Biology 203**, and consent of the instructor.

290. Intermediate Independent Study.

400. Advanced Independent Study and Honors.

Religion

PROFESSOR LONG, *Chair*; PROFESSOR GEOGHEGAN; ASSOCIATE PROFESSOR HOLT; ASSISTANT PROFESSORS GILDAY AND LICHTMANN;
RESEARCH ASSOCIATE GELWICK

The primary and central purpose of the religion major is to provide means for the study of the distinctive subject matter of religion in a liberal arts context. Methods employed in other liberal arts and sciences are also used in the study of religion. Although the department does not provide specific preprofessional training, the study of religion as one of the liberal arts and sciences has a vocational bearing, particularly as preparation for graduate work. Each major is assigned a departmental adviser who assists the student in formulating a plan of study in religion and related courses in other departments. The adviser may also provide counsel in vocational planning. Students who continue in the study of religion after college usually do so in an M.A. or Ph.D. program at a graduate school or in a B.D. or M.Div. program at a theological seminary. Information about other options is available through departmental advisers.

Requirements for the Major in Religion: The major consists of at least eight courses in religion approved by the department. **Religion 101** must be taken not later than the sophomore year. One course from those numbered 10-99 may count toward the major but cannot be substituted for **Religion 101**. Each major must take at least one course from each of the following core areas: religions of South or East Asian origin, religions of Near Eastern origin, and religious thought.

Interdisciplinary Major: The department participates in an interdisciplinary program in art history and religion. See page 180.

Independent Study: A student proposing to undertake an independent study project under the supervision of a faculty member of the department must submit, not later than April 1 or November 1 of the semester *before* he or she wishes to pursue the project, a plan for it on a form to be obtained from the department. The department faculty will review applications and only on the basis of its approval may the project be undertaken. This regulation also applies to honors proposals.

Honors in Religion: Students contemplating honors candidacy should possess a record of distinction in departmental courses, including those which support the project, a clearly articulated and well-focused research proposal, and a high measure of motivation and scholarly maturity. It is recommended that such students complete *two semesters* of independent study in preparing research papers for honors consideration.

Requirements for the Minor in Religion: A minor consists of five courses which may be assembled in one of the following patterns: (1) **Religion 101**, one intermediate level (200) course from each core area, and one seminar at the freshman or advanced (300) level; (2) **Religion 101** and any

two pairs of related sequences at the intermediate level; (3) **Religion 101**, one pair of related semester sequences at the intermediate level, and two seminars, one at the freshman and one at the advanced levels.

Freshman Seminars

These courses are introductory in nature, focusing on the study of a specific aspect of religion, and may draw on other fields of learning. They are not intended as prerequisites for more advanced courses in the department unless specifically designated as such. They include readings, discussions, and reports.

Topics change from time to time to reflect emerging or debated issues in the study of religion.

Enrollment is limited to twenty students for each seminar. Freshmen are given priority for available spaces.

Seminars may be repeated for credit with contents changed.

†15. **Entertaining the Gods: Religious Feasts and Festivals.** Fall 1988. MR. GILDAY.

Religious people throughout the world depend on a variety of means to create, sustain, change, and express their world and world views. While we are accustomed to thinking of words (in books, prayers, songs, stories, etc.) as the primary mode of religious expression, this course will introduce a context that engages a much wider range of creative and expressive media, including dance, music, mime, contests, and mobile displays. We will explore typical festival events from around the world in order to see what they disclose about religious cultures and the people that produce them. (Same as **Asian Studies 15**.)

Introductory Courses

50. **The Bible in Literary Focus.** Spring 1989. MR. LONG.

A study of selected narratives and poems with emphasis upon the Bible's diverse imaginative worlds. Consideration given to the Bible as wellspring of images and motifs for western literary artists. (Same as **English 103**.)

[51. **Existentialism.**]

55. **The Psychology and Spirituality of the Feminine.** Fall 1988. Ms. LICHTMANN.

Focus on (1) exploration of concepts and images of the feminine as psyche, anima and soul from mythological, theological, philosophical and analytical psychological perspectives; (2) examination of paradigms and archetypes of the feminine in contemporary culture in both

conventional and non-conventional religious beliefs and practices. Short essays, discussions, journals and final examination.

Religion 101-104 offer introductions to religion and specific religious traditions. They need not be taken sequentially.

101. Introduction to the Study of Religion. Fall 1988. MR. LONG. Spring 1989. MR. GILDAY.

Basic concepts, methods, and issues in the study of religion, with special reference to examples comparing and contrasting Eastern and Western religions. Lectures, discussions, and readings in classic texts and modern interpretations.

[†102. **Asian Religious Thought.**]

103. Christianity. Fall 1988. MR. GEOGHEGAN.

A study of Christianity from its beginnings to the present with emphasis upon close reading and active discussion of basic New Testament texts and influential interpretations such as Augustine's *Confessions*, Pascal's *Pensees* and Tillich's *Existence and the Christ* in the context of lectures on the historical, conceptual, and imaginal development of the religion as a whole.

[104. **Judaism.**]

Intermediate Courses

†200. **Jewish Origins.** Fall 1988. MR. LONG.

A comparative study of the varieties of Judaism in late antiquity. Readings and discussions of various primary sources including the Bible, Talmud, Midrash, and Dead Sea scrolls, along with modern interpretations.

Prerequisite: **Religion 101, 103, 104**, or consent of the instructor.

201. Christian Origins. Spring 1989. MR. LONG.

A comparative study of the varieties of Christianity in late antiquity. Readings and discussions of various primary sources including the New Testament and non-Biblical writings, along with modern interpretations.

Prerequisite: **Religion 101, 103, 104**, or consent of the instructor.

[†220. **Religious Thought of Ancient India.**]

[†221. **Hinduism in Medieval and Modern India.**]

[†222. **Theravada Buddhism, Culture, and Society.**]

[†223. **Buddhist Sutras in Translation.**]

†224. **Japanese Religion and Culture I.** Fall 1989. MR. GILDAY.

Paradigmatic themes and problems addressed in classical literary, religious, and historical texts of the premodern period. Various ritual, theatrical, and artistic expressions provide a "textual" context for discussion. (Same as **Asian Studies 285**.)

†225. **Japanese Religion and Culture II.** Spring 1990. MR. GILDAY.

An introduction to the major trajectories of Japanese religion and culture from the seventeenth to the twentieth century with particular attention to problems of continuity, change, and interpretation in light of Japan's renewed contact with the West. (Same as **Asian Studies 286**.)

†228. **Religion, Magic, and Science in Ancient India.** Spring, 1989. MR. HARPER.

(Same as **Asian Studies 265**.)

240. **Western Religious Thought I: The Beginnings through the Middle Ages.** Fall 1989. MS. LICHTMANN.

A study of the nature of the person, the world, and God in such seminal thinkers of Western culture as Plato, Plotinus, Jesus, Paul, Augustine, Aquinas, and Eckhart. Emphasis on discussion of primary texts. No prerequisites.

241. **Western Religious Thought II: Modernity and the Present.** Spring 1990. MS. LICHTMANN.

An introduction to modern and contemporary religious movements such as existentialism, rationalism, and mysticism, based on a reading of works by Hegel, Kierkegaard, Buber, Tillich, and Teilhard de Chardin. No prerequisites.

250. **Western Religion and Its Critics.** Fall 1988. MS. LICHTMANN.

Modern challenges to belief in God from Hume, Darwin, Feuerbach, Marx, Nietzsche, and Freud.

251. **Problems in Contemporary Religious Thought.** Spring 1989. MS. LICHTMANN.

Focus on the concept and existence of God, the problem of evil, faith and reason, and human destiny, addressed through comparison of Jewish and Christian thinkers.

260. **Jewish and Christian Responses to the Holocaust.** Spring 1989. MS. LICHTMANN.

An exploration of the resources of the Christian and Jewish traditions, in religious thought, midrash, and mysticism, to determine whether religious response is possible after the Holocaust. Readings from Rubenstein, Fackenheim, Berkovits, and Wiesel in the Jewish tradition and from Jung, Merton, and Bonhoeffer in the Christian.

†287. **Pure Land Buddhism in East Asia.** Fall 1988. MR. GILDAY.

A cross-cultural survey of Pure Land doctrine and practice in China and Japan. Although Pure Land Buddhist thought has its roots in Indian Buddhist speculation of the 1st century BCE, it did not begin to flourish as a popular movement until the 4th and 5th centuries of the common era, and then not in India but in China. Its subsequent importance in East Asian Buddhism cannot be overestimated, in spite of the fact that Western scholarship has often neglected it in surveys of Asian religion. We will examine both institutional and popular forms of Pure Land devotion. By exploring its various historical transformations in China and Japan we will gain valuable insights not only into the philosophical and soteriological features that continue to sustain this movement, but also into the dynamics of sociocultural and religious change in a wider comparative sense. (Same as **Asian Studies 287.**)

Prerequisite: **Religion 101** or **102 (Asian Studies 101)**, or consent of the instructor.

Advanced Courses

The following courses study in depth a topic of limited scope but major importance, such as one or two individuals, a movement, type, concept, problem, historical period, or theme. Topics may change from time to time. Courses may be repeated for credit with contents changed.

[300. **Analytical Psychology and Religion.**]

[301. **Comparative Mysticism.**]

[302. **The Bible in Jewish and Christian Religion.**]

303. **Mysticism in Jewish and Christian Experience.** Fall 1989. MS. LICHTMANN.

A comparative study of the Kabbalistic mystical tradition in Jewish tradition and mystical writers such as Julian of Norwich, Meister Eckhart, John Ruysbroeck, and Thomas Merton in the Christian tradition.

333. **Depth-Psychology and Creativity.** Fall 1988. MR. GEOGHEGAN.

Consideration of questions arising from exploration of creative process as accountable productive originality from the perspective of the psychodynamics of unconsciousness and consciousness in religion, philosophy, art, science and literature.

Emphasis on close reading of first-hand accounts of creative process and achievement in interpretative contexts.

Prerequisites: An intermediate or higher level course in any of the above subjects; or permission of the instructor.

- †390. **Exoticism and the East: Encounters with Holy Others.** Spring 1989. MR. GILDAY.

In this cultural history of Western encounters with the "Orient," we will survey recurring images of Asia in the West, and reflect on the modern emergence of Comparative Religions and Asian Studies as academic disciplines in light of these images and encounters. Beginning with Herodotus and the Hebrews, we will trace the European record of Asia through the medieval period, with its various legends and lore, and into the Ages of Enlightenment and Exploration. Finally, we will examine how these representations have been modified and yet sustained into the modern world, and how these images continue to affect how we perceive Asia and her religions and people even as we approach the twenty-first century. (Same as **Asian Studies 390.**)

Prerequisite: **Religion 101** or **102 (Asian Studies 101)** or consent of the instructor.

290. **Intermediate Independent Study.** THE DEPARTMENT.

400. **Advanced Independent Study and Honors.** THE DEPARTMENT.

Romance Languages

PROFESSOR TURNER, *Chair*; PROFESSOR THOMPSON; ASSOCIATE PROFESSOR NUNN; ASSISTANT PROFESSORS DILLMAN, DUPUY SULLIVAN, AND VANDERWOLK; LECTURER PELLEGRINI; INSTRUCTORS JAFFE AND RUGGIERO; TEACHING FELLOWS BEAUJARD, DuBOSCLARD, AND SÁNCHEZ

The Department of Romance Languages offers courses in French, Spanish, and Italian language and literature. Native speakers are involved in most language courses. Literature courses are conducted in the respective language.

Study Abroad: A period of study in an appropriate country, usually in the junior year, is strongly encouraged for all students of language. Bowdoin College is affiliated with a broad range of programs abroad and interested students should seek the advice of a member of the department early in their sophomore year.

Independent Study: This is an option primarily intended for students who are working on Honors projects. It is also available to students who have taken advantage of the regular course offerings and wish to work more closely on a particular topic. Independent Study is not an alternative to regular course work. An application should be made to a member of the department prior to the semester in which the project is to be undertaken and must involve a specific proposal in an area in which the student can already demonstrate basic knowledge.

Honors in Romance Languages: Majors may elect to write an honors project in the department. This involves two semesters of independent study in the senior year and the writing of an honors essay and its defense before a committee of members of the department. Candidates for department honors should also have a strong record in other courses in the department.

Requirements for the Major in Romance Languages: The major consists of eight courses more advanced than **French, Spanish, or Italian 204**. In French and Spanish these will normally be **205, 209, 311, 312**, and four other courses. The major may consist entirely of courses in either French or Spanish, or it may involve a combination of courses in French, Spanish, and Italian. It is expected that majors who are not writing an honors project will enroll in a topics course in their senior year. No more than two courses may be in independent study and no fewer than four Bowdoin courses should be taken. Prospective majors are expected to have completed **French or Spanish 205 and 209** before the end of their sophomore year.

Requirements for the Minor in Romance Languages: The minor consists of three Bowdoin courses in one language above 204.

Placement: Students who plan to take French or Spanish must take the appropriate placement test at the beginning of the fall semester.

Freshman Seminars in Romance Literatures

Fall 1988

10. Reading Fiction as Re-creation. Ms. JAFFE.

A study of the role of fiction in our lives, and how we become co-creators of the works we read. Readings in prose fiction from the Renaissance to the present by authors including Boccaccio, Cervantes, Balzac, Poe, Kafka, Woolf, Borges, Duras, and Cortazar.

French

101, 102. Elementary French. Every year. Fall 1988. Ms. DILLMAN. Spring 1989. Mr. VANDERWOLK.

Study of the basic forms, structures, and vocabulary. Emphasis on listening comprehension and spoken French. During the second semester, some stress is placed on reading. There are regular language laboratory assignments.

Prerequisite: **French 101** is open to Freshmen and Sophomores who have had two years or less of high school French. Upperclassmen wishing to take **French 101** must have the consent of the instructor.

[119. Seminars for Freshmen and Sophomores.]

- 203. Intermediate French I.** Every fall. Fall 1988. Ms. DILLMAN.

Texts of contemporary literary or social interest provide the focus for conversation, reading, and composition. Systematical review of basic grammatical concepts. Three class hours a week, plus regular language laboratory assignments and sessions with the French teaching fellows. Conducted in French.

- 204. Intermediate French II.** Every semester. Fall 1988. Mr. NUNN. Spring 1989. Mr. VanderWolk.

Texts of contemporary literary or social interest provide the focus for conversation, reading, and composition. Systematical review of basic grammatical concepts. Three class hours a week, plus regular language laboratory assignments and sessions with the French teaching fellows. Conducted in French.

Prerequisite: **French 203** or placement.

- 205. Advanced French I.** Every semester. Fall 1988. Ms. DUPUY SULLIVAN. Spring 1989. Mr. NUNN.

Aims to increase fluency in spoken and written French. Grammar review, one hour a week plus language laboratory. Reading and discussion of short fiction, two hours a week. Conversation with French teaching fellows, one hour a week. Frequent written and oral assignments.

Prerequisite: **French 204** or placement.

- 206. Advanced French II.** Every spring. Mr. NUNN.

Continuation of **French 205**. Reading and discussion of articles and books dealing with contemporary France, two hours a week. Conversation with French teaching fellows, one hour a week. Regular written and oral assignments plus language laboratory.

Prerequisite: **French 205** or placement.

- 209. Introduction to French Literature.** Every semester. Fall 1988. Mr. VANDERWOLK. Spring 1989. THE DEPARTMENT.

An introduction to the appreciation and analysis of French literature through close readings, short papers, and discussions of selected poems and short prose works from various periods of French literature. The major writers selected include Molière, Corneille or Racine, Ronsard, La Fontaine, Hugo, and Sartre. The aim is to introduce the student to a critical approach to literature in general and to French literature in particular. Though this is not a survey course, it provides illustrations of chronological succession in French literature. Papers and class discussions in French.

Prerequisite: **French 205** or placement.

[311. Survey of French Literature I.]

312. Survey of French Literature II. Spring 1989. MR. NUNN.

Emphasis on the texts of the seventeenth and eighteenth centuries which have had a major influence on French thought. Principal authors: Montaigne (*Essais*), Descartes (*Discours de la méthode*), Pascal (*Pensées*), Molière (*Tartuffe*), La Fontaine (*Fables*), La Bruyère (*Caractères*), La Rochefoucauld (*Maximes*), La Fayette (*La Princesse de Clèves*), Voltaire (*Lettres philosophiques*), Diderot (*Supplément au voyage de Bougainville*), D'Alembert (*Discours préliminaire*), Rousseau (*Réveries d'un promeneur solitaire*). Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

313. French Poetry I. Spring 1989. MS. DILLMAN.

A study of French poetry from the Renaissance to the late nineteenth century. Emphasis on the nature of poetry as a play upon and with language. Close attention to active understanding of the "rules of the game": the poetic devices and generic conventions and their evolution. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

314. French Poetry II. Fall 1990. MS. DILLMAN.

Modern poetry, like all modern forms of artistic expression, is an attack on established forms of organization and of perception. It aims to abolish or at least to rethink traditional notions such as prose and poetry, art and non-art, conscious and unconscious, subject and object. The course examines these aspects of modernism in the works of Rimbaud, Baudelaire, Breton, Césaire, Michaux, and Ponge. Conducted in French.

315. French Drama I. Fall 1990. MR. NUNN.

French drama of the seventeenth and eighteenth centuries. A survey of classicism and the major new currents of the eighteenth century. Plays by Corneille, Molière, Racine, Marivaux, Beaumarchais, and others studied. Close interpretive reading of texts and viewing of taped performances.

316. French Drama II. Fall 1988. MS. DUPUY SULLIVAN.

Critical study of dramatic theory and practice of the modern period. The principal authors studied are Artaud, Arrabal, Beckett, Genêt, Ionesco, and Sartre. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

317. The French Novel I. Fall 1988. MR. VANDERWOLK.

The development of the genre during the nineteenth century, with emphasis on the works of Balzac, Stendhal, Flaubert, and Zola. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

318. The French Novel II. Spring 1989. THE DEPARTMENT.

Development of the novel in the modern period. Close attention to critical theory in order to redefine the novel as a genre. Principal authors studied: Gide, Proust, Sartre, and Robbe-Grillet. Conducted in French.

Prerequisite: **French 209** or consent of the instructor.

319. French Women Writers and Writing. Spring 1989. Ms. DILLMAN.

An examination of nineteenth and twentieth century French women prose writers and poets and how they define themselves in and through their writing. The context of their writing will be explored historically and theoretically.

Prerequisite: **French 209** or consent of the instructor.

320. Topics in French Literature and Culture I. Every fall.

Designed to offer students who have a general knowledge of French literature and civilization the opportunity to study in greater depth individual authors, particular themes, or aspects of French civilization. Conducted in French. *The course may be repeated for credit with the contents changed.*

This course is intended primarily for seniors.

Fall 1988. The Historical Novel. MR. NUNN.

An examination of the genre as practiced principally by Hugo, Flaubert, and Yourcenar.

[321. Topics in French Literature and Culture II.]**[322. French Literature in Translation.]****400. Independent Study.** THE DEPARTMENT.**Italian****101, 102. Elementary Italian.** Every year. Ms. PELLEGRINI.

Three class hours a week and one weekly drill session with assistant. An introduction to Italian grammar and elementary reading, writing, and speaking skills. Some required laboratory work. Enrollment limited to twenty-five. **Italian 101** is open to Freshmen and Sophomores who have had two years or less of high school Italian. Upperclassmen wishing to take **Italian 101** must have the consent of the instructor.

203, 204. Intermediate Italian. Every year. Ms. PELLEGRINI.

Development of oral and written expression in Italian, accompanied by a review of fundamentals. Three class hours a week. In both courses, modern Italian short stories and current news items serve as a basis for conversation and written assignments, as well as grammar study.

Prerequisite: **Italian 102** or consent of the instructor.

- 209, 210. Advanced Italian.** Every year. Fall 1988. Ms. RUGGIERO.

Intended to increase the student's command of spoken and written Italian. Written and oral work based upon readings in representative modern authors (novels, short stories, and poems by Fogazzaro, d'Annunzio, Pascoli, Pirandello, Svevo, and Calvino, among others). Emphasis on grammar and vocabulary as well as style in expository and creative writing. An introduction to the appreciation and analysis of contemporary writing, the course prepares students for advanced studies in Italian literature. Conducted in Italian.

Prerequisite: **Italian 204** or consent of the instructor.

- 322. Italian Literature in Translation.** Every fall. Fall 1988. Ms. RUGGIERO.

A critical reading of selections from the founders of Italian literature: Dante, Petrarch, and Boccaccio. Emphasis on poetics as well as philosophical and theological concerns. Intended also as an introduction to the study and criticism of Italian literature, the course examines the ways in which the three major Italian figures of the Middle Ages establish an authorial voice within and against tradition.

[400. Advanced Independent Study and Honors.]

Spanish

- 101, 102. Elementary Spanish.** Every year. Fall 1988. Ms. JAFFE. Spring 1989. MR. TURNER.

Three class hours a week plus drill sessions and laboratory assignments. An introduction to the grammar of Spanish, aiming at comprehension, reading, writing, and simple conversation. Emphasis in the first semester is on grammar structure, with frequent oral drills. In the second semester more attention is paid to reading and writing.

Prerequisite: **Spanish 101** is open to Freshmen and Sophomores who have had two years or less of high school Spanish. Upperclassmen wishing to take **Spanish 101** must have the consent of the instructor.

- 203, 204. Intermediate Spanish.** Every year. Fall 1989. MR. THOMPSON. Spring 1989. Ms. JAFFE.

Three class hours a week and a conversation session with the teaching assistant. Grammar fundamentals are reviewed and class conversation and written assignments based on reading in modern literature.

Prerequisite: **Spanish 102** or placement.

- 205. Advanced Spoken and Written Spanish.** Every fall. MR. TURNER.

Intended to increase proficiency in the four skills. A variety of texts will be assigned with the aim of improving speed and accuracy of

reading and will also serve as the basis for controlled discussion aimed at spoken fluency. Visual media will be used to develop aural comprehension and as the basis for the study of culture. There will be frequent written assignments.

Prerequisite: **Spanish 204** or placement.

209. Introduction to the Study and Criticism of Hispanic Literature.

Every spring. MR. THOMPSON.

Intended to develop an appreciation of the major genres of literature in Spanish and to foster the ability to discuss them orally and in writing. Personal responses as well as the use of critical methods encouraged in discussions with the teacher and the teaching assistant. Conducted in Spanish.

311. Medieval and Golden Age Spanish Literature. Every other year.

Fall 1989. MR. TURNER.

Readings from the major writers of the Spanish Renaissance and the baroque period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

312. Modern Spanish Literature. Every other year. Fall 1988. MR.

THOMPSON.

Readings from the major writers of Spanish literature from the eighteenth century to the modern period. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

313. Spanish American Literature before the 20th century. Every other year. Spring 1989. MS. JAFFE.

An introduction to the development of major literary movements and genres in Latin America from the colonial period through the nineteenth century. The course will explore themes such as the quest for identity, civilization and barbarism, cultural layering, and utopias. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

314. Modern Spanish American Literature. Every other year. Spring 1990. MS. JAFFE.

An introduction to modern Spanish American Literature from modernism to the generation of the Boom. Conducted in Spanish.

Prerequisite: **Spanish 209** or consent of the instructor.

320, 321. Topics in Spanish and Spanish American Literature I and II. Every year.

Designed to provide students who have a basic knowledge of literature in Spanish the opportunity to study more closely an author, a genre, or a period. **Spanish 320** and **321** may be repeated for credit as long as the topic is different. Conducted in Spanish.

Prerequisite: any two of **Spanish 311, 312, 313, and 314** or consent of the instructor.

Fall 1988. **Twentieth Century Spanish American Poetry.** MR. TURNER.

Spring 1989. **Spanish Theater.** MR. THOMPSON.

322. Modern Spanish American Literature in English Translation. Spring 1989. MR. TURNER.

An introduction, with readings and classes conducted in English, to significant works and major themes of twentieth century literature of Spanish America. Readings will include works by Borges, Cortázar, Puig, Fuentes, Neruda, and García Márquez.

No prerequisite.

400. Independent Study and Honors. THE DEPARTMENT.

Russian

ASSOCIATE PROFESSOR KNOX, *Chair*; ASSISTANT PROFESSOR MILLER;
INSTRUCTOR LAHTI; MELLON FELLOW SHULSKY

Requirements for the Major in Russian Language and Literature:

The Russian major consists of ten courses (eleven for honors) including **Russian 101, 102, 203, 204**; four courses in Russian above **Russian 204**; one approved course in either Russian literature in translation or Slavic civilization, or an approved related course in government, history, or economics; and one semester of independent study (for honors, two semesters). A student may work solely within the Department of Russian or jointly with both a member of the department and a faculty member from outside the department who is an expert in some area of Soviet/Russian studies. Students will be encouraged to spend one semester of the junior year at either the Pushkin Institute in Moscow or at Leningrad State University.

The Minor in Russian consists of seven courses (including the first two years of Russian). At least two of these may be taken outside the department with the permission of the department chairman. Courses outside the Department of Russian which may be counted for either the major or the minor are **Economics 214; Government 230, 235, 271, and 341; History 217 and 218.**

Independent Language Study: In addition to courses in Russian, independent language study of Serbo-Croatian may be offered with the approval of the dean of the College.

101, 102. Elementary Russian. Every year. 1988-89. MS. KNOX, MS. SHULSKY, AND MS. LAHTI.

Emphasis on the acquisition of language skills through imitation and

repetition of basic language patterns; the development of facility in speaking and understanding simple Russian. Conversation hour with native speaker.

- 203, 204. Intermediate Russian.** Every year. 1988-89. Fall 1988. Ms. LAHTI. Spring 1989. MR. MILLER.

A continuation of **Russian 101, 102**. Concentration on maintaining and improving the student's facility in speaking and understanding normal conversational Russian. Writing and reading skills also stressed. Conversation hour with native speaker.

Prerequisite: **Russian 101, 102**.

- 305, 306. Advanced Readings in Russian.** Every year. Fall 1988. Ms. LAHTI. Spring 1989. MR. MILLER.

Intended to develop the ability to read Russian at a sophisticated level by combining selected language and literature readings, grammar review, and analysis of Russian word-formation. Discussion and written reports *in Russian*. Conversation hour with native speaker.

Prerequisite: **Russian 203, 204**.

- 309. Special Topics in Russian Literature.** Every fall. Ms. KNOX.

Intended to enable the student to utilize knowledge of Russian as a research tool in the investigation of Russian literature of the nineteenth century. Special attention paid to the genre of the short story and the *povest'* (short novel).

Prerequisite: **Russian 305, 306**.

- 310. Special Topics in Modern Russian Literature.** Every spring. Spring 1989. Ms. LAHTI.

Intended to enable the Russian student to read and discuss in Russian various works of modern Russian literature (Soviet and émigré). Special attention placed on the development of the short story and the *skaz* (folk tale). Discontinuity and commonalities between prerevolutionary and contemporary Soviet literature examined. Short term papers to be written in Russian.

Prerequisite: **Russian 309**.

- 290. Intermediate Independent Study.** THE DEPARTMENT.

- 400. Advanced Independent Study and Honors.** THE DEPARTMENT.

An original piece of research in which an attempt is made to elicit from the student a contribution to the field of Russian studies. Major primary and secondary sources should be read in Russian. *This course may be repeated for credit with the contents changed.* Upon demand this course is conducted as a small seminar on topics not covered in the above courses, such as *Soviet press, Russian poetry or scientific translations*.

Prerequisite: **Russian 310** or consent of instructor.

In English Translation

- 320. Nineteenth-Century Russian Literature.** Every other fall. Fall 1989. MR. MILLER.

Works of the great Russian writers Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, and Tolstoy are read. The course is concerned with the development of the Russian novel. Russian realism, its development and trends, are discussed as a common denominator of nineteenth-century prose, with special focus given to the Westernizer-Slavophile dispute. Majors are required to do some of the reading in Russian.

- 321. Twentieth-Century Russian Literature.** Every other spring. Spring 1990. MS. KNOX.

A two-part discussion of twentieth-century Russian prose before and after the official proclamation of Socialist Realism. The first part is devoted to the innovative period of modernism and the avant-garde in the 1920s. The second half examines the return to didactic realism and the emergence of an underground movement of dissidence. Special attention given to the recurring Eastern or Scythian theme. Writers discussed are Andreyev, Bely, Zoshchenko, Bulgakov, Sinyavsky, Solzhenitsyn, Aksyonov, Brodsky, and others. Majors are required to do some of the reading in Russian.

- 322. Topics Course.** THE DEPARTMENT.

Works in specific areas of Russian literature not investigated in other departmental courses. A specific author, genre, literary movement or social phenomenon may be emphasized. *This course may be repeated for credit with contents changed.* Majors are required to do some of the reading in Russian. This course is offered only when staffing permits.

Fall 1988. **Women in Russian Society and Culture.** MS. KNOX.

Examination of the roles women have played in Russian literature and Russian society. Special attention given to women revolutionaries and the "new status" of women guaranteed by the Revolution. Readings include short stories, novels, autobiographies, and nonfiction works. Authors include Pushkin, Tolstoy, Dostoevsky, Chekhov, Kollontai, Tsvetaeva, Akhmatova, M. Ginzburg, and others. Russian majors will do some reading in Russian.

Spring 1989. **Russian Drama.** MS. LAHTI.

This survey course will cover major Russian and Soviet playwrights with special attention given to modern theatrical activity since the turn of the century. Russian majors will do some reading in Russian.

- 323. Dostoevsky and the Novel.** Every other spring. Spring 1989. Ms. KNOX.

An examination of Dostoevsky's use of the novel to portray the "fantastic" reality of the city and its effects on the human psyche. Special attention given to the author's quest for guiding principles of freedom and love in a world of violence, cynicism, and neuroses. Emphasis on Dostoevsky's anti-Western and anti-materialist bias in his portrayal of the tragic struggle between extreme individualism and self-renunciation in a utopian brotherhood. Majors required to do some of the reading in Russian.

- 325. Slavic Civilization.** Every other spring. Spring 1989. MR. MILLER.

An introduction to Slavic Eastern Europe, its ethnic and linguistic background, its ancient history, its subsequent political and cultural movements, its relationship to the West and continuing problems of nationalism within Eastern Europe and the Soviet Union. A wide range of readings assigned from various fields.

Sociology and Anthropology

PROFESSOR McEWEN, *Chair*; PROFESSORS KERTZER AND ROSSIDES;
VISITING PROFESSOR ISHIDA; ASSOCIATE PROFESSORS BOLLES AND FLOGE;
ASSISTANT PROFESSORS BELL AND KAPLAN; INSTRUCTORS DICKEY AND
PHILLIPS; VISITING LECTURER BIGELOW; RESEARCH ASSOCIATE CRAWFORD

Requirements for the Major: In consultation with an adviser, each student plans a major program that will nurture an understanding of society and the human condition, demonstrate how social knowledge is acquired through research, and enrich his or her general education. On the practical level, a major program prepares the student for graduate study in sociology and anthropology and contributes to preprofessional programs such as law and medicine. It also provides background preparation for careers in urban planning, the civil service, social work, business or personnel administration, social research, law enforcement and criminal justice, the health professions, journalism, secondary school teaching, and programs in developing countries.

A student may choose either of two major programs or two minor programs:

The Major in Sociology consists of eight courses, including **Sociology 201, 209**, and one course at the 300 level or above. A minimum of six courses in sociology may be supplemented by two advanced courses from anthropology or, as approved by the department chair, by two courses from related fields to meet the student's special needs. **Sociology 201** should be taken in the sophomore year.

The Major in Anthropology consists of eight courses, including **Anthropology 101, 102, 201, and 301**, and one course with an areal focus (numbered in the 130s and 230s). One or two of the eight courses may be taken from the advanced offerings in sociology or, as approved by the department chair, from related fields to meet the student's special needs. Study abroad programs are encouraged as part of a student's study of other cultures.

The Minor in Sociology consists of five sociology courses, including **Sociology 201 and 209** and one course at the 300 level or above.

The Minor in Anthropology consists of five anthropology courses, including **Anthropology 101 and 301**, either **102 or 201**, and an area study course (130s and 230s).

For either major or minor program, one semester of independent study may be counted.

Departmental Honors: Students distinguishing themselves in either major program may apply for departmental honors. Awarding of the degree with honors will ordinarily be based on honor grades in major courses and a written project (emanating from independent study), and will recognize the ability to work creatively and independently and to synthesize diverse theoretical, methodological, and substantive materials.

Sociology

[12. Freshman Seminar. Sociology of Women, Health, and Healing.]

101. Introduction to Sociology. Every semester. THE DEPARTMENT.

The major perspectives of sociology. Application of the scientific method to sociological theory and to current social issues. Theories ranging from social determinism to free will are considered, including the work of Marx, Weber, Durkheim, Merton, and others. Attention is given to such concepts as role, status, society, culture, institution, personality, social organization, the dynamics of change, the social roots of behavior and attitudes, social control, deviance, socialization, and the dialectical relationship between individual and society.

151. Sociology of Health and Illness. Spring 1989. Ms. BELL.

This course examines the social contexts of physical and mental health, illness and medical care. Deals with such topics as the social, environmental, and occupational factors in health and illness; the structure and processes of health care organizations; development of health professions and the health work force; doctor-patient relationships; the illness experience; health care and social change (e.g., the women's health movement, holistic health care, socialized medicine).

Prerequisite: Sophomore standing.

201. Introduction to Social Research. Every spring. MR. McEWEN.

Provides firsthand experience with the specific procedures through which social science knowledge is developed. Emphasizes the interaction between theory and research, and examines the ethics of social research and the uses and abuses of research in policy making. Reading and methodological analysis of a variety of case studies from the sociological and anthropological literature. Field and laboratory exercises that include observation, interviewing, use of available data (e.g., historical documents, statistical archives, computerized data banks, cultural artifacts), sampling, coding, use of computer, elementary data analysis and interpretation. Lectures, laboratory sessions, small-group conferences.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

203. The Family. Fall 1989. MS. BELL.

The diversity of the family as a social institution in different times and places illuminates our understanding of American families. An examination of contemporary research on the family life cycle, variation in family composition, and trends in family living. The family is considered from several theoretical perspectives, leading to more comprehensive knowledge of this institution and the central role it plays in human life.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

206. Urban Sociology. Spring 1990. MS. FLOGE.

An investigation into the diverse social patterns of urban life. Attention given to the expansion of urban populations in different cultural settings, contrasting the course of urbanization in the West and in traditional societies. The changing relation of urban centers to the rest of society is also analyzed, along with some of the problems generated by urbanization and contemporary approaches to resolving them. Students have an opportunity to study a particular aspect of urban society in depth.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

†208. Race and Ethnicity. Fall 1989. THE DEPARTMENT.

The social and cultural meaning of race and ethnicity with special emphasis on the politics of events and processes in contemporary America. Analysis of the causes and consequences of prejudice and discrimination. Examination of the relationships between race and class. Comparisons between the status of racial and ethnic minorities in the United States and their status in other selected societies.

(Same as **Afro-American Studies 208.**)

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

209. Social Theory. Every fall. Ms. PHILLIPS.

A critical examination of some representative theories of the nature of human behavior and society. Social theory is related to developments in philosophy and natural science, and symbolic developments as a whole are related to social developments. The thought of some major figures in the ancient world (especially Plato, Aristotle, and the Stoics) and the medieval world (especially St. Thomas and Marsilio of Padua) is analyzed, but the main focus is on the figures who have struggled to explain the nature of capitalism, especially Hobbes, Locke, the *philosophes*, Comte, Spencer, Sumner, Ward, and with special attention, some of the great theoreticians of the "contemporary" world: Marx, Durkheim, Weber, Simmel, Pareto, Lenin, Cooley, Mao, Marcuse, Parsons. The course's main purpose is to provide the student with an opportunity to test familiar ideas and to acquire new ones about the nature of society, especially the structure and dynamics of industrial society.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

210. Sociology of Work and Organizations. Spring 1990. Ms. BELL.

Exploration of the structure, function, and meaning of work in modern industrial society, especially the United States. Examination of the rise and composition of the industrial labor force and the experiences of workers in different occupations and professions. Also analysis of the growth of complex organizations (bureaucracies) as well as their impact on and response to broader society from a variety of sociological perspectives. Consideration of alternatives (e.g., cooperatives, collectives). Students may study a particular occupation or profession in depth.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

213. Social Stratification. Spring 1989. Mr. ROSSIDES.

A critical examination of representative theories of inequality which opens with a review of the basic questions and concepts in social stratification, and then develops case studies of three types of social inequality: caste (India, South Africa), estate (feudal Christendom, imperial China), and class (USSR). The heart of the course is an extended analysis of the American class system to determine sources of stability and conflict, and to identify legitimate and illegitimate forms of inequality. Considerable attention is given to theories of imperialism and to

determining the United States' role in the international system of stratification. The final theme examines the theory which purports to see some form of postindustrial society emerging in the West.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

214. Science, Technology, and Society. Spring 1990. Ms. BELL.

Examines the progress and problems associated with scientific and technological changes such as the space race in the 1950s and 1960s, nuclear power, and the production and distribution of pesticides and other hazardous substances. Considers the social and intellectual origins of scientific knowledge and technological innovation and their impact on society from different theoretical perspectives. Identifies the social structure and dynamics of science as an institution and examines the relationship between the institution of science and the content of scientific knowledge. Explores the role of science and scientific knowledge in technological innovation.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

215. Criminology and Criminal Justice. Spring 1989. MR. McEWEN.

Focuses on crime and corrections in the United States with some cross-national comparisons. Examines the problematic character of the definition of "crime." Explores empirical research on the character, distribution, and correlates of criminal behavior and interprets this research in the light of social structural, cultural, and social psychological theories of crime causation. Discusses implications of nature and causes of crime for law enforcement and the administration of justice. Surveys the varied ways in which prisons and correctional programs are organized and assesses research about their effectiveness.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

†216. The Sociology of Education: Comparative Perspectives on Japanese Education. Fall 1988. MR. ISHIDA.

The sociological study of education, with special focus on Japan. Examines the relationship of education to socio-economic status and upward mobility, with emphasis on science and technology rather than humanities and social sciences. Gives attention to such concepts as knowledge, values, language, and conformity. Formal education, education in business firms, life-long education, and women's education are compared between the United States and Japan. Authoritarianism, qualification, and ascriptive orientation as emphasized in Japanese education will be considered.

(Same as **Asian Studies 282.**)

Prerequisite: Previous course in sociology or anthropology or consent of the instructor.

218. Sociology of Law. Fall 1988. MR. MCEWEN.

An analysis of the development and function of law and legal systems in preindustrial and industrial societies. Examination of the relationships between law and social change, law and social inequality, and law and social control. Special attention is paid to social influences on the operation of legal systems and the resultant gaps between legal ideals and the "law in action."

Prerequisite: Previous course in sociology or anthropology or government.

219. Sociology of Sex Roles. Fall 1988. MS. FLOGE.

Various theoretical perspectives, including role theory, are used to study sex roles and their implications for society and individuals. The extent and possible causes (including biological, cultural, social, and economic) of sexual differences in behavior are examined. Topics include historical changes in sex roles as well as cultural and national differences.

Prerequisite: Previous course in sociology or anthropology, or consent of the instructor.

†230. The Populations of Asia. Spring 1989. MS. FLOGE.

Analysis of the components of population composition and dynamics in various Asian countries, in particular China, India, and Japan. Both the causes and consequences of population changes will be examined. Attention will be given to such issues as population growth and economic development; trends in mortality and life expectancy; labor force changes; the demographic transition; national and international migration; changing age structure; family planning programs; zero population growth; and women's status. Special consideration will be given to the relation between population dynamics and public policy decisions (i.e., one-child policies, day care, mandatory retirement). (Same as **Asian Studies 210.**)

Prerequisite: Previous course in sociology or anthropology or consent of the instructor. Not open to students who have previously taken **Sociology 217.**

†231. Social Change in Contemporary Japan. Spring 1989. MR. ISHIDA.

An introduction to the study of post-war Japan. Main foci are changes in family, marriage, values and norms, institutions and the organization of politics, economy, education, and religion. Secularism, westernization in behavior, industrialization in production and business, and urbanization are examined. Same as **Asian Studies 281.**

Prerequisite: Previous course in sociology or anthropology or consent of instructor.

250. Collective Behavior. Fall 1988. MR. MCEWEN.

An examination of the nature of collective behavior with primary emphasis on social movements. This course describes and analyzes social phenomena such as crowds, audiences, publics, riots, reform movements, conservative movements, and revolutions. Students may study a selected aspect of collective behavior in depth.

Prerequisite: Two courses in the department or in psychology, or consent of the instructor.

310. Advanced Seminar: Selected Topics.

This course may be repeated for credit with the contents changed.

Spring 1989. **Advanced Seminar on Women and Work.** MS. FLOGE.

The course will explore the work of women, from the housewife to the executive. Although the focus is on work in the United States, some cross-national comparisons will be discussed. Attention will be given to the causes and consequences of the differences between men's and women's work. The three divisions of labor by sex will be examined: that within the private sphere (the home), that between the private and public spheres, and that within the public sphere of the paid labor force. The social structural constraints which perpetuate these three divisions will be examined. During the second half of the course, students present for discussion their own research in an area of their choice.

Prerequisite: Two courses in sociology or anthropology, or consent of the instructor.

290. Intermediate Independent Study in Sociology. MS. BELL, MS. FLOGE, MR. MCEWEN, MS. PHILLIPS, AND MR. ROSSIDES.

400. Advanced Independent Study and Honors in Sociology. MS. BELL, MS. FLOGE, MR. MCEWEN, MS. PHILLIPS, AND MR. ROSSIDES.

Anthropology

101. Introduction to Cultural Anthropology. Every spring. MR. KERTZER.

An introduction to the concepts, methods, theories, findings, and applications of cultural anthropology. Study of the differences and similarities among the cultures of the world and attempts by anthropologists to explain them. Among the topics to be covered are: anthropological fieldwork, the nature of culture, the relation of language to culture, the relation of the environment to culture, family and kinship, political and economic systems, religion, and ethnocide.

†102. **Introduction to World Prehistory.** Every fall. MS. KAPLAN.

An introduction to the disciplines of anthropology and archaeology and the studies of human biological and cultural evolution. Among the subjects covered are conflicting theories of human biological evolution, the debates over the genetic and cultural bases of human behavior, the expansion of human populations into various ecosystems throughout the world, the domestication of plants and animals, the shift from nomadic to settled village life, and the rise of complex societies, the state, and civilization.

†131. **African-American Cultures.** Fall 1988. MS. BOLLES.

See **Afro-American Studies 101**, page 95.

†132. **Latin American Societies.** Spring 1990. MS. BOLLES.

Emphasizes the peoples and societies of the circum-Caribbean. Topics include kinship, religion, music, tourism, and politics. Special attention paid to Jamaica, Grenada, and Cuba.

Prerequisite: Freshmen require consent of the instructor.

133. **Modern Italy.** Fall 1988. MR. KERTZER.

An overview of the development of modern Italian society, beginning with the unification of Italy in the mid-nineteenth century. Particular attention is paid to topics in social and political history, including the changing role of the Church and religion, the creation of a national identity, the rise of the peasant leagues and the early socialist movement, life in the Fascist period, the successes and crises of the Italian Communist Party, changes in family life and in male-female relations, the enduring conflict between northern and southern Italy, and the social implications of migration.

Prerequisite: Sophomore standing.

201. **Anthropological Research.** Spring 1989. MS. BOLLES.

Anthropological research methods and perspectives are examined through readings of a sample of the "best" classic and recent ethnography, computer literacy, and the student's own fieldwork experience. Topics covered are: ethics, analytical and methodological techniques, the interpretation of data and the use and misuse of anthropology.

Prerequisite: Previous course in anthropology or sociology.

203. **Psychological Anthropology.** Spring 1989. MS. DICKEY.

This course focuses on four topics in psychological anthropology: the interaction of culture, society and personality; the effects of culture on cognition; definitions and treatment of mental illness in different cultures; and the application of psychoanalytical theory in anthropology. Different approaches are examined to show how anthropological theories and cross-cultural studies can be combined with psychological

analysis to provide a more complete understanding of cultural influences on human mental processes.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

†206. **A Cross-Cultural Perspective on Families.** Spring 1991. Ms. BOLLES.

A cross-cultural view of family types and of household organization among traditional and contemporary societies. The focus will be on how families and kin groups are organized at different points in time, under varying social, cultural, and economic conditions. Contemporary issues affecting families, such as urbanization, suburbanization, labor force participation, and migration, will be examined.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

207. **Ritual and Myth.** Fall 1988. MR. KERTZER.

Designed to provide a social scientific perspective in the study of religion. Various modes of analysis are considered, including evolutionism, functionalism, symbolic structuralism, psychoanalysis, cultural ecology, and Marxism. A wide range of religious phenomena from diverse societies is examined, including magic, sorcery, witchcraft, shamanism, revitalization movements, cults, and civil religion. Emphasis is on the place of ritual and myth in the larger social context.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

209. **Politics, Culture, and Society.** Fall 1989. MR. KERTZER.

The cross-cultural study of politics ranging from nomadic bands to nation-states. Issues examined include: How egalitarian are nonstate political systems? How is social order maintained in societies lacking centralized government? How is warfare waged? How are inequalities of political power within a society legitimized? What is the role of symbolism in political legitimation and in revolution? What social processes are involved in attracting and mobilizing political support?

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

†220. **Hunters and Gatherers.** Spring 1990. Ms. KAPLAN.

Hunters and gatherers have been characterized as being small groups of people who are constantly on the move and exhibit the simplest levels of social, political, and economic organization. This course traces the origins of this thinking and challenges this stereotype. Topics to be examined include hunter-gatherer adaptations to the world's changing environment, strategies of resource procurement, settlement patterns,

technological complexity, levels of social, economic, and political integration, and religious life. This cross-cultural study compares such groups as the Australian Aborigines, Bushmen, Native Americans, and New Guinea Highlanders.

Prerequisite: At least one previous course in anthropology or sociology and sophomore standing.

222. Expressions of Culture Through Performance. Fall 1988. Ms. DICKEY.

“Cultural performance” covers not only drama, dance and music, but also such cultural media as ritual, literature, celebration, and spectacle. The anthropological study of these media examines their performers, producers, and audiences in addition to their form and content. Cultural performance will be approached in two ways: first, to see what it uniquely reveals about a culture to both natives and outsiders; and second, to consider what social, psychological, and political effects it can have on participants and their societies. This course will examine several types of performance in detail, including Indian cinema, Indonesian drama, New Guinea initiation ritual, Brazilian Carneval, and the Olympics.

Prerequisite: Previous course in anthropology or sociology, or consent of instructor.

224. Women in American Society: Implications of Race, Ethnicity, and Class. Spring 1990. Ms. BOLLES.

Addresses the question of how women’s lives are affected by their being born black, Hispanic, Chicano, Asian-American, native American, ethnic white, or white, in American society. Comparative approach outlines the variation of women’s experiences on the basis of their cultural, racial, and ethnic realities. Discusses economic, political, and domestic roles; social status; socialization; education; the arts; and religion as they affect each group of women. (Same as **Afro-American Studies 224**.)

Prerequisite: **Afro-American Studies 101**, or a previous course in anthropology or sociology.

†226. Political Identity and Leadership in South Asia. Spring 1989. Ms. DICKEY.

In South Asia, political identities are often based on “primordial” ties such as caste, religion, ethnicity, language and region. Political leadership involves various strategies for addressing these communal interests and the importance of issues such as personality politics and patronage in electoral leadership in several South Asian countries. (Same as **Asian Studies 236**.)

Prerequisite: Previous course in anthropology or sociology, or consent of instructor.

†231. **Native Peoples and Cultures of Arctic America.** Spring 1989. Ms. KAPLAN.

For thousands of years Eskimos (Inuit), Indian, and Aleut peoples lived in the Arctic regions of North America as hunters, gatherers, and fishermen. Their clothing, shelter, food, and implements were derived from resources recovered from the sea, rivers, and the land. The characteristics of Arctic ecosystems are examined. The social, economic, political, and religious lives of various Arctic-dwelling peoples are explored in an effort to understand how people have adapted to harsh northern environments.

Prerequisite: Previous course in anthropology or sociology.

232. **Peoples of Northernmost Europe.** Fall 1988. MR. BIGELOW.

An examination of the past and present cultures of Northern Scandinavia and the far northern islands of the North Atlantic: the Orkney, Shetland, and Faeroe Islands, Iceland, and Greenland. The anthropology of societies ranging from the early Viking explorers of North America to the reindeer herders of modern Finland will be discussed. Archaeological, ethnohistoric and ecological evidence will be reviewed in outlining the interplay of environmental and human factors which influenced the growth, and in some cases the extinction, of the northernmost Norse, Sami (Lapp), and Celtic cultures.

Prerequisites: Previous course in anthropology or sociology.

†235. **South Asian Cultures and Societies.** Fall 1988. Ms. DICKEY.

An introduction to the cultures and societies of South Asia, from Himalayan kingdoms and island nations to the vast sub-continent of India, Pakistan, and Bangladesh. Despite the diversity of these areas, they are linked by common threads including religious beliefs, principles of social stratification (caste and caste-like), roles of family members, and the legacy of colonial experiences. These institutions and symbolic patterns are examined in different parts of South Asia, and current and historical changes discussed. (Same as **Asian Studies 235.**)

Prerequisite: Previous course in anthropology, sociology, or South Asian studies.

†239. **North American Indians.** Spring 1990. THE DEPARTMENT.

An overview and analysis of American Indian societies from pre-Columbian times to the present. Topics include the political, economic, family, and religious organization of native American societies; the impact of European expansion on Indian societies; and the current situation—both on and off reservation—of North American Indians.

Prerequisite: Previous course in anthropology or sociology, or consent of the instructor.

301. Anthropological Theory. Every spring. MR. KERTZER.

An examination of the development of various theoretical approaches to the study of culture and society. Anthropology in the United States, Britain, and France is covered from the nineteenth century to the present. Contemporary controversies in anthropological theory are discussed. Among those considered are Morgan, Tylor, Durkheim, Boas, Mauss, Malinowski, Radcliffe-Brown, Margaret Mead, Geertz, and Levi-Strauss.

Prerequisite: Two courses in anthropology or consent of the instructor.

†305. The Black Aesthetic. Spring 1989. MS. BOLLES.

An examination of the artistic expressions of black America in the visual arts. Focus on past and contemporary black artists, the social and aesthetic reasons for their work, and their contributions to art and society. African and Caribbean materials serve as points for comparison in the African diaspora tradition.

Topics include traditional Afro-American arts and crafts, painting, sculpture, graffiti, and other visual media. The role of the black woman as artist is also discussed. (Same as **Afro-American Studies 305.**)

Prerequisite: Two courses in anthropology, sociology, or Afro-American Studies, or consent of the instructor and junior standing.

290. Intermediate Independent Study in Anthropology. MS. BOLLES, MS. DICKEY, MS. KAPLAN, AND MR. KERTZER.**400. Advanced Independent Study and Honors in Anthropology.** MS. BOLLES, MS. DICKEY, MS. KAPLAN, AND MR. KERTZER.

Theater Arts

DIRECTOR OF THEATER RUTAN, *Chair*; ASSISTANT PROFESSOR AND
DIRECTOR OF DANCE VAIL; MR. RODERICK

The Department of Theater Arts comprises two divisions: Dance and Theater. Although there is no major offered, students with special interest are encouraged, with faculty advice, to self design a major.

Division of Dance

The Division of Dance seeks to provide a coherent course of study in dance history, theory and criticism, choreography, and performance studies, including dance technique and repertory. The division's humanistic orientation emphasizes dance's relation to theater and the fine arts as well as its fundamental connection to the broad liberal arts curriculum. The program's goal is dance literacy, cognitive, kinesthetic, and creative understanding, and

the development of skills—keen perception, imaginative problem solving, concentration, and respect for craft—important to original work in all fields.

101. Introduction to Dance. Fall 1988. Ms. VAIL.

A general introduction to dance as a technical, creative discipline and cultural/historical activity. Students will learn basic techniques for strength, flexibility, alignment, and coordination. They will explore social, ritual, and theatrical forms such as American swing, Balkan folk dance, Indian Bharata Natyam, English Morris dance, European ballet, and post-modern choreography. Studio work will be augmented by reading, discussion, videos, visiting experts, and field trips. No prerequisites. Offered every other fall.

121. Topics in Dance History.

Fall 1989. **The Ballet: European Theater Dance from Louis XIV to the Ballets Russes.** Ms. VAIL.

A history of western European dance from the mid-seventeenth to the early twentieth century. Examination of style in light of contemporaneous music and drama as well as in the broader social and cultural context. Film, visiting artists, and live performances will supplement readings and discussions. This course may be repeated for credit with the contents changed. Offered every other fall.

141. Approaches to Choreography.

Spring 1989. **Improvisation and Composition.** Ms. VAIL.

A studio course, augmented by reading, discussion, and viewing, in which students learn to craft dances and multi-media performance works by exploring various compositional methods. Readings, films, field trips, and visiting choreographers supplement class work, which results in a final project. Enrollment limited to fifteen.

Prerequisite: Consent of the instructor. This course may be repeated for credit with contents changed. Offered every spring.

291. Intermediate Independent Study in Dance. Ms. VAIL.

401. Advanced Independent Study in Dance. Ms. VAIL.

Performance Studies

Performance Studies courses earn one-half credit per semester. Each course may be repeated a maximum of four times for credit. Students may also participate in all classes on a co-curricular basis, space permitting, and with the consent of the instructor. Visiting instructors for 1988-89: **Paul Sarvis, Gwyneth Jones.**

171. Modern Dance Technique.

Training for flexibility, strength, musicality, and coordination. Stu-

dio classes include exercises and movement combinations. Two 90-minute classes per week and participation in rehearsals and performance required. One-half credit. Graded credit/fail. Classes taught by visiting professionals four days per week, Monday through Thursday afternoons, 3:30-5:00 PM. Offered every semester.

181. Dance Repertory and Performance.

Students learn faculty-choreographed works or reconstructions of important historical dances. Class meetings are conducted as rehearsals for performance at the end of the semester. Two 60-minute classes, plus one 90-minute technique class per week, and rehearsal and performance participation required. One-half credit. Graded credit/fail. Limited to twelve students. Offered every semester.

Division of Theater

The Division of Theater in the Department of Theater Arts offers courses in acting, directing, set design, technical theater, and, upon occasion, courses in areas of special interest. The theater technician teaches stagelighting.

[63. Playwriting.]

70. Acting and Directing. Every semester. MR. RUTAN.

A studio class for students interested in the fundamentals of acting and directing. Enrollment limited to fifteen.

Prerequisite: Consent of the instructor.

[71. Set Design.]

72. Technical Theater. Every semester. MR. RODERICK.

An introductory course in the fundamentals of stagelighting. Enrollment limited to ten.

Prerequisite: Consent of the instructor.

†[73. Asian Rites and Theater.]

290. Intermediate Independent Study in Theater. MR. RUTAN.

400. Advanced Independent Study in Theater. MR. RUTAN.

Women's Studies

Coordinated by the Committee on Women's Studies

ASSOCIATE PROFESSOR CAFFERTY, *Chair*; VISITING INSTRUCTOR HUNSINGER

Women's Studies is an interdisciplinary program that incorporates into the curriculum recent research done on women and gender. The Women's

Studies Program explores the relationship between traditional disciplinary approaches to women's roles and emerging perspectives in the arts, humanities and natural and social sciences. The program addresses women's experience on its own terms, and, using gender as a category of analysis, examines the status of and the relationship between women and men.

The **Minor** consists of **Women's Studies 101**, normally taken in the freshman or sophomore years, and four additional courses. To ensure the interdisciplinary nature of the minor, three of these courses must be outside the student's major department, and one must be outside the division of the major.

The Women's Studies courses below may also be used to formulate a student-designed major that emphasizes women's studies. Related independent studies are offered in all humanities and social science departments. Further information on women's studies is available at the Women's Resource Center.

101. Introduction to Women's Studies. Every semester. Ms. HUNSINGER.

Provides an interdisciplinary overview of issues and approaches central to the study of women and gender. Through historical and literary analysis, a series of cross-cultural themes is examined, including images and stereotypes of women, identity and role issues, creativity, work, feminism, and other gender-related concerns.

Enrollment limited to twenty-five.

CROSS LISTINGS

Afro-American Studies

224. Women in American Society: Implications of Race, Ethnicity, and Class. Spring 1990. Ms. BOLLES.

See *Afro-American Studies* 224, page 95.

305. The Black Aesthetic. Spring 1989. Ms. BOLLES.

See *Afro-American Studies* 305, page 96.

Anthropology

206. A Cross-Cultural Perspective on Families. Spring 1991. Ms. BOLLES.

See *Anthropology* 206, page 238.

Art

[382. Theory and Interpretation of Art.]

Classics

311. **Women in Antiquity.** Fall 1988. Ms. BOYD.
See **Classics 311**, page 127.

Economics

10. **Poverty and Discrimination (Freshman Seminar).** Fall 1988. MR. MALONEY.
See **Economics 10**, page 132.
217. **The Economics of Population.** Spring 1990. Ms. CONNELLY.
See **Economics 217**, pages 133-134.
301. **The Economics of Family.** Fall 1991. Ms. CONNELLY.
See **Economics 301**, pages 135-136.

English

13. **Realism and Sensationalism (Freshman Seminar).** Fall 1988. MR. LITVAK.
See **English 13**, page 140.
16. **Gender and Sexuality in Romantic Literature (Freshman Seminar).** Fall 1988. MR. COLLINGS.
See **English 16**, page 140.
18. **American Women Writers (Freshmen Seminar).** Fall 1988. Ms. DIEHL.
See **English 18**, page 141.
24. **Contemporary Ethnic American Literature (Freshman Seminar).** Spring 1989. Ms. GOODRIDGE.
See **English 24**, page 141.
26. **Men and Women (Freshman Seminar).** Spring 1989. Ms. RAABE.
See **English 26**, page 141.
271. **American Literature 1860-1917.** Every other spring. Spring 1989. Ms. GOODRIDGE.
See **English 271**, page 146.
275. **Afro-American Fiction.** Fall 1988. Ms. PEMBERTON.
See **English 275**, page 146.
276. **Afro-American Poetry.** Spring 1989. Ms. PEMBERTON.
See **English 276**, page 146.

280. **Women Writers in English.** Every other spring. Spring 1989. Ms. DIEHL.

See **English 280**, page 147.

[281. **Forms of Narrative.**]

300. **Literary Theory.** Fall 1989. MR. LITVAK.

See **English 300**, page 147.

320. **The Politics of Representation in the Nineteenth-Century Novel.** Fall 1988. MR. LITVAK.

See **English 320**, page 147.

German

[51. **German Women Writers.**]

Government

242. **Gender, Race, and Class: The Politics of Otherness.** Spring 1989. MR. RENSENBRINK.

See **Government 242**, page 162.

341. **Advanced Seminar in Political Theory: Politics of Utopia.** Fall 1988. MR. RENSENBRINK.

See **Government 341**, page 164.

History

11. **Women in Britain and America, 1750-1920 (Freshman Seminar).** Fall 1989. Ms. MCMAHON.

See **History 11**, page 166.

246. **Women in American History.** Fall 1988. Ms. MCMAHON.

See **History 246**, page 172.

248. **Family and Community in American History.** Spring 1989. Ms. MCMAHON.

See **History 248**, page 172.

264. **Islam in Africa.** Fall 1988. MR. STAKEMAN.

See **History 264**, page 174.

331. **A History of Women's Voices in America.** Spring 1990. Ms. MCMAHON.

See **History 331**, page 176.

Psychobiology

50. **Mind and Brain: Historical and Contemporary Issues.** Fall 1988.
See **Psychology 50**, page 212.

Religion

55. **The Psychology and Spirituality of the Feminine.** Fall 1988. Ms.
LICHTMAN.
See **Religion 55**, page 216.

Romance Languages

319. **French Women Writers and Writing.** Spring 1989. Ms. DILLMAN.
See **French 319**, page 224.

Russian

322. **Women in Russian Society and Culture.** Fall 1988. Ms. KNOX.
See **Russian 322**, page 229.

Sociology

- [12. **Sociology of Women, Health, and Healing (Freshman Seminar).**]
151. **Sociology of Health and Illness.** Spring 1989. Ms. BELL.
See **Sociology 151**, page 231.
203. **The Family.** Fall 1989. Ms. BELL.
See **Sociology 203**, page 232.
[217. **World Population.**]
219. **Sociology of Sex Roles.** Fall 1988. Ms. FLOGE.
See **Sociology 219**, page 235.
230. **Population of Asia.** Spring 1989. Ms. FLOGE.
See **Sociology 230**, page 235.

Hawthorne-Longfellow Library

THE STRENGTH of a college library rests in its collections of books and other library materials and in the ability of its staff to make the library useful to students. Bowdoin's Nathaniel Hawthorne-Henry Wadsworth Longfellow Library is exceptionally strong in its reputation as a college library. Totalling more than 725,000 volumes, its collections have been built up over a period of more than 190 years and include an unusually large proportion of distinguished and valuable volumes. Similarly distinguished has been the roster of librarians of the College, a list that includes John Abbot, Calvin Stowe, Henry Wadsworth Longfellow, and George T. Little. Its present full-time staff includes thirteen professional librarians and seventeen library assistants.

The first books that belonged to the library—a set of the Count Marsigli's *Danubius Pannonica-Mysicus*, given to the College in 1796 by General Henry Knox (who had been a bookseller in Boston before he achieved fame as George Washington's chief ordnance officer)—are still a part of its collections. In the early decades of the nineteenth century Bowdoin's library, largely because of extensive gifts of books from the Bowdoin family and the Benjamin Vaughan family of Hallowell, Maine, was one of the largest in the nation. It has been maintained as one of the larger college libraries of the country, but its areas of growth are now defined by the curriculum of the College and restrained by the desirability of containing it as a collection to which students can have easy, and almost complete, access. In addition to its 725,000 volumes (a count which includes bound periodicals and newspapers), the library has a collection of approximately 60,000 maps, over 2,000 photographs, and more than 500,000 manuscript items. The current annual rate of acquisition is about 18,000 volumes and the annual expenditure per student is more than \$1,000.

The Hawthorne-Longfellow Library building was opened in the fall of 1965. The library occupies 60,000 square feet of its floor space and will eventually incorporate the 26,000 square feet presently used for the College's administrative offices. An expansion project completed in 1984 provided more seating, additional open stack shelf space, and climate control for Special Collections. The library has seating for more than 575 readers, of which over 500 are at individual study tables and carrels, and shelving to house all of its collections (with the exception of the rare materials in the Special Collections Suite) on open stacks.

The entrance level of the building contains the portions of the library of most immediate use to its readers: the circulation desk, the card catalog, reference books and bibliographies, current newspapers, current periodicals, periodical indexes, and two large and handsome reading areas. Study

stations are conveniently dispersed on this floor, as they are throughout the building.

The lower level of the library houses Bowdoin's extensive collection of bound periodicals, its collections of microfilm and other microforms, government documents, and the reserved reading shelves.

Special features of the second floor are an exhibit area and the President Franklin Pierce Reading Room, informally furnished and giving a broad view through floor-to-ceiling windows. Near this room are more newspapers and magazines for recreational reading. Also on this floor are two suites of ten faculty studies each and small rooms for student typing or group study. The rest of this floor is shelving surrounded by carrels.

More shelving and carrels occupy the principal portion of the third floor. There are nine additional faculty studies on this floor. The eastern end of the third floor is the Special Collections Suite. This includes, in addition to shelf space in a climate-controlled area for Bowdoin's rare books and manuscripts and space for their use, a conference room, and a staff and faculty lounge.

The collections of the library are strong (though inevitably of varying strength) in all areas covered by the curriculum of the College, and a constant effort is maintained to see that representative publications in fields outside the current curriculum are added to the library. There is special strength in documentary publications relating to both British and American history, in the books relating to exploration and the Arctic regions, in books by and about Carlyle, in books and pamphlets about Maine, in materials about the Huguenots, in books and pamphlets on World War I and on the history of much of middle Europe in this century, and in the literary history of pre-twentieth-century France.

The reference collection includes most of the English-language encyclopedias and a good representation in original editions of major foreign encyclopedias—from two editions of the monumental eighteenth-century *Encyclopédie* of Diderot to such modern works as the *Grand Larousse Encyclopédique*, *Der Grosse Brockhaus*, the *Enciclopedia Universal Illustrada Europeo-Americana*, the *Bol'shala Sovetskaya Entsiklopedia*, and the *Enciclopedia Italiana de Scienze, Lettere ed Arti*. In it also are the principal national bibliographies and other major bibliographical tools. Dispersed in their proper places throughout the collections are such distinguished sets as the *Studies and Documents* of the American Institute of Musicology in Rome, Armando Cortesão's *Portugaliae Monumenta Cartographia*, the elephant-folio edition of John James Audubon's *Ornithological Biography* (his "Birds of America"), E. S. Curtis's *The North American Indian*, the *Rerum Britannicarum Medii Aevi Scriptores*, Jacques Paul Migne's *Patrologiae* (Latina), the *Scriptores Rerum Germanicum*, Reuben Gold Thwaites's *Early American Travels*, and *The Victoria History of the Counties of England*. Scholarly sets include the publications of the Camden Society, the Early English Text Society, the Egypt Exploration

Society, the Geological Society of America, the Hakluyt Society, the Henry Bradshaw Society, the Huguenot Society of London, the Prince Society, the Royal Historical Society, the Royal Society, the Scottish History Society, the Scottish Text Society, and the Société des Anciens Textes Français. Of comparable, or perhaps even greater, distinction is Bowdoin's collection of more than 90,000 bound volumes of periodical publications.

Special collections in the Hawthorne-Longfellow Library comprise extensive collections of books, manuscripts, and other materials by and about both Hawthorne and Longfellow; books and pamphlets collected by Governor James Bowdoin; the private library of James Bowdoin III; an unusually large collection of late eighteenth- and early nineteenth-century books (particularly in the sciences) collected by Maine's distinguished Vaughan family; books, periodicals, and pamphlets contemporaneous to the French Revolution; the books, papers, and memorabilia of the Abbott family; an unusually fine representation of the items published in the District of Maine and in the state during the first decade of its statehood; and the books printed by the three most distinguished presses in Maine's history: the Mosher Press, the Southworth Press, and the Anthoensen Press.

Also in the Special Collections Suite are the printed items relating to the history of the College and the chief collections of manuscript archives of the College. These include much material on Bowdoin alumni and extend far beyond a narrow definition of official college records. Here also is the library's general collection of manuscripts. Outstanding among the manuscripts are the collections of the papers of Generals O. O. Howard and Charles Howard, of Senator William Pitt Fessenden, and of Professors Parker Cleaveland, Alpheus S. Packard, Henry Johnson, and Stanley Perkins Chase; collections of varying extent of most of Bowdoin's presidents, especially Jesse Appleton, Joshua L. Chamberlain, William DeWitt Hyde, and Kenneth Charles Morton Sills; manuscripts by Kenneth Roberts, Robert Peter Tristram Coffin, Kate Douglas Wiggin, Charles Stephens, Edwin Arlington Robinson, Elijah Kellogg, and such contemporary authors as Vance Bourjaily, John Pullen, and Francis Russell.

The books and manuscripts in Bowdoin's special collections are not treated simply as museum pieces. They are freely open to use by qualified scholars and are extensively used in introducing undergraduates—in their research projects and other independent work—to the variety of research materials regularly used in the scholarly world and which they can expect to use if they continue into university graduate work.

Special collections include also the Bliss collection of books on travel, on French and British architecture, and other fine books (miscellaneous in nature but largely relating to the history of art and architecture) which are housed in the extraordinarily handsome Susan Dwight Bliss Room in Hubbard Hall. These books are additionally distinguished by their fine

bindings. The books in this room and the room itself (with its Renaissance ceiling which once graced a Neapolitan palazzo) were the gift of Miss Bliss in 1945.

During term time the library is open from 8:30 A.M. to midnight Monday through Saturday, and on Sunday from 10:00 A.M. to midnight. When the College is not in session, the library is open 8:30 A.M. to 5:00 P.M. Monday through Friday. Small departmental collections in art, biology, chemistry, mathematics, and music are housed contiguous to the offices of the departments and are available for use on separate schedules of opening.

The operations of the library and the growth of its collections are supported by the general funds of the College and by gifts from alumni and other friends of the library and of the College. The library is annually the recipient of generous gifts of both books and funds for the immediate purchase of books or other library materials. It is always especially desirous of gifts of books, manuscripts, and family records and correspondence relating to the alumni of the College. The income of more than a hundred gifts to the College as endowment is directed to the use of the library.

Bowdoin College issues a separate publication honoring those in whose names scholarships and book funds have been donated.

Bowdoin College Museums

MUSEUM OF ART

AN ART COLLECTION has existed at Bowdoin almost since the founding of the College. The earliest acquisition of major importance was a group of 141 old master drawings bequeathed to the College in 1811 by James Bowdoin III. This was the first public collection of its kind in America and contains, among many treasures, a superb landscape by Pieter Bruegel the Elder. James Bowdoin III's collection of old master paintings came to the College in 1813; the Bowdoin family portraits were given in 1826 at Mrs. Sarah Bowdoin Dearborn's bequest.

Although various parts of the College's art collection were on view during the first half of the nineteenth century, it was not until 1855 that a special gallery devoted to the collection came into being in the College Chapel. This gallery was made possible by a gift from Theophilus Wheeler Walker, a cousin of President Leonard Woods. It was as a memorial to Walker that his two nieces, Harriet Sarah and Mary Sophia Walker, donated funds in 1891 for the erection of the present museum building, designed by Charles Follen McKim of McKim, Mead & White. Four murals of Athens, Rome, Florence, and Venice by John La Farge, Elihu Vedder, Abbott Thayer, and Kenyon Cox, respectively, decorate the museum's rotunda. In 1984, after careful examination of the layers of paint, the rotunda was repainted in the original McKim colors, returning the space to its 1890s splendor.

The museum holds one of the most important collections of American colonial and federal portraits, including works by Smibert, Feke, Blackburn, Copley, Stuart, Trumbull, and Sully. Among the five examples by Robert Feke is the full-length likeness of *Brigadier General Samuel Waldo*, generally regarded as the finest American portrait of the first half of the eighteenth century. The nine paintings by Gilbert Stuart include pendant portraits of *Thomas Jefferson* and *James Madison*. A complete catalogue of this collection, *Colonial and Federal Portraits at Bowdoin College*, was published in 1966.

The College's collection of ancient art contains sculpture, vases, bronzes, gems, coins, and glass of all phases of the ancient world. The most notable benefactor in this area was Edward Perry Warren h'26, the leading collector of classical antiquities of the first quarter of the twentieth century. Five magnificent ninth-century B.C. Assyrian reliefs from the Palace of Ashurnazirpal II, the gift to the College of Henri Byron Haskell m 1855, are installed in the museum's rotunda. *Ancient Art in Bowdoin College*, a descriptive catalogue of these holdings, was published in 1964.

In recent years the College has been the recipient of a Samuel H. Kress Study Collection of twelve Renaissance paintings; a large collection of medals and plaquettes presented by Amanda Marquesa Molinari; a fine

group of European and American pictures and decorative arts given by John H. Halford '07, and Mrs. Halford; a collection of Chinese and Korean ceramics given by Governor William Tudor Gardiner h '45, and Mrs. Gardiner; and a collection of nineteen paintings and 168 prints by John Sloan bequeathed by George Otis Hamlin.

The College's Winslow Homer Collection comprises paintings, drawings, prints, and memorabilia pertaining to his career. The first painting by Homer to enter the museum, a watercolor entitled *The End of the Hunt*, was contributed by the Walker sisters from their personal collection. In the fall of 1964, a gift from the Homer family brought to Bowdoin the major portion of the memorabilia remaining in the artist's studio at Prout's Neck, letters written over a period of many years to members of his family, and photographs of friends, family, and of Prout's Neck. More recently, a large collection of woodcuts was purchased to augment these holdings and create an important center for the scholarly study of the life and career of this important American artist.

In the late 1960s and early 1970s, the museum acquired through gifts and purchase a survey collection of paintings, drawings, and prints by the American artist and illustrator Rockwell Kent.

The permanent collections also contain fine examples of the work of such nineteenth-century and twentieth-century American artists as Martin Johnson Heade, Eastman Johnson, George Inness, Thomas Eakins, John Singer Sargent, William Glackens, Marsden Hartley, Jack Tworckov, Arshile Gorky, Franz Kline, Andrew Wyeth h '70, Leonard Baskin, and Alex Katz.

In 1982, the museum published the *Handbook of the Collections*, dedicated to the memory of John H. Halford '07. In 1985, a comprehensive catalogue of the College's permanent collection of old master drawings was published. *The Architecture of Bowdoin College*, an illustrated guide to the campus by Patricia McGraw Anderson, was published in the spring of 1988.

In addition to exhibitions of the permanent collections, the museum schedules an active program of temporary exhibitions of art lent by institutions and private collectors throughout the United States. Among the important shows organized by the museum in recent years have been *The Haystack Tradition: Art in Craft Media*; *Treasures from Near Eastern Looms*; *Winslow Homer Watercolors*; *Old Master Drawings at Bowdoin College*; *Alex Katz: Small Paintings*; *Yvonne Jacquette: Tokyo Nightviews*; *Makers '86* (a juried biennial exhibition of Maine crafts); *Twilight of Arcadia: American Landscape Painters in Rome 1830-1880*; and *New England Now: Contemporary Art from Six States*.

The College lends art objects in the custody of the museum to other institutions throughout the United States and, occasionally, to institutions abroad. The museum also sponsors symposia and special lectures. Since 1973, symposia on American furniture, nineteenth-century decorative arts,

American Indian art, nineteenth-century American architects, conservation of art, oriental rugs, and American pewter have been held.

In 1985 the Associates Program merged with other special campus support groups to become the Association of Bowdoin Friends. This organization shares even more effectively the resources of the museum and campus with the community beyond the College. Its participants have access to a wide variety of activities and programs sponsored by the museum. Another vital support group of ninety-three volunteers conducts tours and assists the museum staff with clerical activities and educational programs.

The amount of space in the Walker Art Building was more than doubled in 1976 following extensive renovation. Two galleries for exhibiting the museum's permanent collections and two temporary exhibition galleries were added on the lower level. One of the new galleries was dedicated to the memory of John H. Halford '07, another in memory of John A. and Helen P. Becker.

PEARY-MACMILLAN ARCTIC MUSEUM AND ARCTIC STUDIES CENTER

The Peary-MacMillan Arctic Museum was founded in honor of two famous arctic explorers and Bowdoin alumni, Admirals Robert E. Peary (Class of 1877) and Donald B. MacMillan (Class of 1898). On April 6, 1909, after a lifetime of arctic exploration, Peary became the first person to reach the North Pole. MacMillan was Peary's chief assistant on the 1909 expedition. For thirty-eight years MacMillan explored Labrador, Baffin Island, Ellesmere Island, and Greenland. Twenty-six of his expeditions were made on board the *Bowdoin*, a schooner he designed for work in ice-laden northern waters. MacMillan took college students on the expeditions and introduced them to the natural history and anthropology of the North. He was not the first to involve Bowdoin students in arctic exploration, however. In 1869 Paul Chadbourne, a professor of chemistry and natural history, had sailed along the Labrador and West Greenland coasts with students from Williams and Bowdoin.

The museum, established in 1967, is located on the first floor of Hubbard Hall, for many years the Bowdoin College Library. The building was named for General Thomas Hubbard of the Class of 1857, a generous benefactor of the College and financial supporter of Peary's arctic ventures. The museum's exhibitions were designed by Ian M. White, currently director of the Fine Arts Museum of San Francisco, who sailed with MacMillan in 1950. Generous donations from members of the Class of 1925, together with gifts from George B. Knox of the Class of 1929, a former trustee, and other interested alumni and friends, made the museum a reality. Continued support from friends of the College, the Kane Lodge, and the Russell and Janet Doubleday Foundation have allowed the museum to continue to grow.

The museum's collections include equipment, paintings, and photographs relating to the history of arctic exploration, natural history specimens, and artifacts and drawings made by Inuit and Indians of arctic North America. The museum has large collections of ethnographic photographs recording past lifeways of native Americans taken on the expeditions of MacMillan and Robert Bartlett, an explorer and captain who plied northern waters for nearly fifty years. Diaries, logs, and correspondence relating to the museum's collections are housed in the Special Collections section of the Hawthorne Longfellow Library.

The Arctic Studies Center was established in 1985 as a result of a generous matching grant from the Russell and Janet Doubleday Foundation to endow the directorship of the center, in recognition of the Doubleday's close relationship to MacMillan. The center links the resources of the museum and library with teaching and research efforts, and hosts traveling exhibitions, lectures, workshops, and educational outreach projects. Through course offerings, field research programs, employment opportunities, and special events the center promotes anthropological, archaeological, and environmental investigations of the North.

Language Media Center

THE LANGUAGE MEDIA CENTER, formerly the Film, Video, and Language Laboratories, was renovated in the summer of 1985, with the help of a gift from the Pew Memorial Trust. Located in the basement of Sills Hall, the center supports the study of foreign languages by providing a fourteen-station Tandberg audio-active language laboratory, twelve individual viewing stations for VHS, Beta, and $\frac{3}{4}$ -inch videocassettes (European and American standards), a shortwave receiving station, a videodisc viewing station, and eight Macintosh microcomputer stations.

The center offers a group viewing area which accommodates up to thirty-five persons and a lobby area for informal viewing of live television transmitted from an eleven-foot domestic satellite dish reception system located on the roof of Morrell Gymnasium. Students are able to watch live French, Spanish, and Italian language television on the C and KU bands from this system. A sixteen-foot international reception system, located on the roof of Sills Hall, enables students to watch live programming from the Soviet Union, Eastern Europe, South America, and the Middle East.

In addition, the Language Media Center provides an array of audio and video services, such as the high-speed duplication of audio tapes and the duplication of video tapes, cataloging and storage of A-V materials, and display of popular foreign language newspapers and periodicals. The center also sponsors weekly foreign films on video in Smith Auditorium. Installation of a new video projection system in Smith Auditorium was completed in the spring of 1986.

Performing Arts

DRAMA

THE DIVISION OF THEATER within the Department of Theater Arts consists of the director of theater and the technical director. The main thrust of its activities is in making possible extensive extracurricular participation in the theater. The student drama group, Masque and Gown, was founded in 1903.

Credit courses in acting and directing are taught by the director of theater. Lighting is taught by the technical director. Each year at least three major productions are produced by the Masque and Gown on the stage of Pickard Theater. For many years one production each season has been a musical. In March 1988, *The Boy Friend* was presented to capacity houses. One very popular production each year is usually a Shakespeare drama or classical play. In the fall of 1987, *Henry IV Part 1* was presented. There are about eleven different productions during the school year.

Pickard Theater, the generous gift in 1955 of Frederick William Pickard, LL.D., of the Class of 1894, includes a modern, 600-seat theater with proscenium stage equipped with a hemp and counterweight system for flying scenery and an electronic lighting control system. In addition, Memorial Hall contains a scene shop and, on the lower floor, the G.H.Q. Playwrights' Theater, a 100-seat open-stage theater for experimental work by students.

Membership in the Masque and Gown results from major work on one or minor work on two of the plays produced each season. An executive committee of undergraduates elected by the members consults with the director of theater and determines the program for each year, handles publicity of the club, and organizes the production work. The Masque and Gown needs—as well as actors, actresses, and playwrights—box-office workers, publicists, directors, designers, builders, painters, electricians, stage hands, and costumers.

One of the most important activities of the club has been its encouragement of playwriting. For over fifty years the Masque and Gown has sponsored an annual student-written one-act play contest, with cash prizes. The contest is now underwritten by the generous gift of Hunter S. Frost '47.

DANCE

The Division of Dance within the Department of Theater Arts evolved from the Bowdoin Dance Program, which began in 1971. Each year since then the Bowdoin Dance Group, the student performing ensemble, has presented a major spring performance of student and faculty works in Pickard Theater. Students also perform annually at Parents Weekend in the fall and in the Museum of Art in May, in addition to presenting informal studio shows.

Performances are linked to participation in technique, repertory, and choreography classes, held in the Dance Studio at Sargent Gymnasium.

The Division of Dance offers a comprehensive academic curriculum, including courses in dance history, theory, criticism, and choreography taught by the director of dance. Performance studies courses, on an academic or co-curricular basis, are taught by the director and visiting dance professionals.

The foundation for performance studies classes in dance technique and repertory is modern dance, including a wide spectrum of styles that may include aspects of ballet or jazz, and other idioms, but focuses principally on an inventive, unrestricted approach to movement. Modern dance offers an appropriate format in which to explore the general nature of dance and the creative potential of undergraduates at a small liberal arts college. Classes in ballet and jazz are also offered on a co-curricular basis.

Since 1973 the Division of Dance (then the Dance Program), often as part of the Bates-Bowdoin-Colby Dance Alliance, has invited nationally known dance companies, choreographers, and critics to the campus for teaching residencies and performances. A partial list includes Meredith Monk, Douglas Dunn, Pauline Koner, Kei Takei, Pilobolus, Wendy Perron, Dana Reitz, Phoebe Neville, Impulse Dance Company, Sukanya, The Court Dance Company of New York, Susan Foster, the Copasetics, Art Bridgman and Myrna Packer, Doug Varone, Johanna Boyce, and critics Laura Shapiro, Marcia B. Siegel, and Jill Johnston. These performers teach master classes and offer lecture/demonstrations as part of their visits to campus. In 1988-89, two New York dance companies, The Copasetics and Doug Varone and Dancers, will present concerts and teach classes for Bowdoin students.

MUSIC

Bowdoin offers its students a variety of opportunities in music. Undergraduates participate in the Chamber Choir, College Chorale, Chamber Orchestra, Meddiebempsters, Miscellania, What Four (a barbershop quartet), and chamber music ensembles. Student instrumentalists perform in informal repertory sessions and more formal concerts of solo and chamber music.

The Chamber Choir is a mixed ensemble chosen by audition. It concentrates on the performance of serious choral literature from the Renaissance to the present. Its activities include a Christmas carol concert, occasional tours, and on-campus concerts.

The College Chorale, a large mixed chorus of students, faculty members, and townspeople, presents one major choral work with orchestra each semester. Past performances have included Schubert's *Mass in G*, Vaughn Williams's *Fantasy on Christmas Carols*, Mozart's *Vesperae Solennes*, the Bach *B-Minor Mass*, and Handel's *Israel in Egypt*.

The Meddiebempsters are a men's double quartet widely known through their concerts at other colleges and European tours. On several occasions they have performed on network radio and television and have appeared in New York's Town Hall. The Miscellania are a women's augmented double quartet founded in 1972. They give joint concerts with the Meddiebempsters and, in 1977, began tours which take them to other New England campuses.

Student instrumental ensembles, appearing in numerous concerts on the campus, have presented music by composers as diverse as Monteverdi, Corelli, Stockhausen, Gabrieli, Mozart, Terry Riley, and John Cage. Faculty performers also participate in these ensembles, offering a wide range of chamber music from past centuries, as well as mixed-media works of the avant-garde, incorporating electronics, film, slides, theater, and dance.

The Chamber Orchestra, composed primarily of students, presents concerts featuring works by a wide spectrum of composers: Bach, Beethoven, Copland, Haydn, Ives, Mozart, Schubert, and Stravinsky. The orchestra also performs with the College Chorale.

Contemporary music plays an important role in Bowdoin's musical life. Student composers may prepare performances of their own works in special concerts, using the services of student, faculty, and visiting instrumentalists. Visiting composers frequently appear on campus, and have included Elliott Carter, Milton Babbitt, Virgil Thomson, George Crumb, Pauline Oliveros, Morton Subotnick, Donald Erb, and Otto Luenig. Bowdoin operates an electronic music studio with two synthesizers, tape decks, and mixing and editing facilities, used by students in the electronic music course and for independent study projects.

Bowdoin is also concerned with music composed before 1750 and has a fine collection of early instruments for student performance. Included are a number of recorders, krummhorns, cornetti, shawms, and rauschpfeifs. The collection also includes a single-manual Challis harpsichord and a dual-manual Broekman harpsichord built expressly for Bowdoin. Early music is stressed in the department's choral activities as well.

Bowdoin has three organs on campus. There is a 1927 Austin organ in the Chapel, the gift of Cyrus H. K. Curtis; a 1975 tracker action Jeremy Cooper organ, gift of Chester William Cooke III '57, in the Gibson Hall recital room; and an Allen electronic organ, gift of the Class of 1909.

When an artist is invited to perform at Bowdoin, the visit often includes discussions with small groups of students, appearances in classes, and the reading of student compositions. The Curtis-Zimbalist Concert Series, established in 1964 and the principal program through which musicians are invited to perform at Bowdoin, has included the Wesleyan University Gamelan, the Elizabethan Dance Ensemble, the Chinese Music Ensemble of New York, Joan Morris and William Bolcom, the Emmanuel Wind Quartet,

the Apple Hill Chamber Players, the Lydian String Quartet, and Kurt Ollmann, baritone.

Professional teachers are available to give instruction in voice, piano, and other instruments to those students who wish to continue their study of applied music. All students of applied music are also expected to participate in ensembles. The College provides practice rooms without charge. Instrumental and music lockers are available in Gibson Hall for a small fee.

Department of Athletics and Physical Education

BOWDOIN BELIEVES that physical education is an important part of the total educational program. The Department of Athletics provides students with opportunities for satisfying experiences in physical activities for the achievement of health and physical fitness. The physical education program includes classes which emphasize instruction in sports activities with carry-over value, intramural athletics, and intercollegiate competition. Students are encouraged to use the athletic facilities to participate in free recreational play.

Intercollegiate Athletics: During the past year, Bowdoin offered intercollegiate competition in the following varsity sports: men's teams were fielded in football, cross-country, basketball, track (winter and spring), skiing, swimming, hockey, wrestling, lacrosse, tennis, baseball, soccer, and squash; women's teams were fielded in cross-country, tennis, field hockey, ice hockey, squash, skiing, swimming, track (winter and spring), soccer, basketball, lacrosse, volleyball, and softball; coed teams were offered in golf and sailing. Junior varsity or freshman teams are maintained in intercollegiate sports whenever possible.

Physical Education: The instructional program includes a wide variety of activities utilizing campus and off-campus facilities, both natural and man-made. The activities have been selected to provide the Bowdoin community (students, faculty, and staff members) with the opportunity to receive basic instruction in exercises and leisure-time activities. It is hoped that participants will develop these activities into lifelong commitments. The program varies from year to year to meet current interests.

Intramural Athletics: Men's, women's, and coeducational leagues at the novice, intermediate, and advanced levels are offered in touch football, outdoor soccer, indoor and outdoor volleyball, golf, bicycling, cross-country running, box lacrosse, hockey, basketball, inner-tube water polo, track, wrestling, swimming, and softball. All students and members of the faculty and staff are eligible to participate in the intramural program unless they are playing for a corresponding varsity, junior varsity, or club team.

Outdoor Facilities: The outdoor athletic facilities of the College are excellent. Whittier Field is a tract of five acres that is used for football games and also includes a 400-meter, all-weather track. It has a grandstand with team rooms beneath it. Pickard Field is a tract of seventy-five acres that includes baseball and softball diamonds; spacious playing fields for lacrosse,

soccer, football, touch football, and softball; eight tennis courts; and a cross-country ski track. The new athletic facility, including a field house and pool, is attached to Pickard Field House.

Indoor Facilities: The College possesses indoor facilities that are the equal of its outstanding outdoor facilities. Morrell Gymnasium contains a modern basketball court with seats for about 2,000 persons; two visiting team rooms; eleven squash courts; a locker room with 480 lockers; shower facilities; a modern, fully equipped training room; adequate offices for the director of athletics and his staff; and other rooms for physical education purposes. Sargent Gymnasium includes a wrestling room, a weight-training room, a Nautilus room, a special exercise room, a regulation basketball court, a training room, and locker rooms with 470 lockers. The William F. Farley Field House contains a 200-meter, six-lane track and four tennis courts; a 114-by-75-foot, 16-lane pool with two one-meter and one three-meter diving boards; a weight room; a trainers' room; locker and equipment rooms; space for aerobics; and meeting rooms. Completing the athletic facilities is the Dayton Arena, which has a refrigerated ice surface 85 by 200 feet and seating accommodations for 2,600 spectators.

Student Life and Activities

BOWDOIN provides for its students a campus life that combines traditional features of the liberal arts college with modern facilities and programs to enrich the experience of undergraduate life. The curriculum offers formal instruction in those subjects appropriate to the development of educated and enlightened citizens. Within this framework students are encouraged and are permitted sufficient flexibility to develop their talents and capacities for leadership. Along with the library, laboratories, art museum, visual arts center, concert and lecture halls, social center, health center, and athletic facilities, continuing attention is given to the less tangible—but more important—intellectual resources of the College. Art shows, lectures, concerts, films, and dramatic productions are all planned to provide stimulating experiences that will enhance the student's everyday work within the formal curriculum.

Honor System: A student-initiated proposal, it places complete responsibility upon the individual students for integrity in all academic work, including the use of the library. During registration, students sign a pledge signifying that they understand and agree to abide by the Bowdoin College Honor System. In so doing, students pledge neither to give nor to receive unacknowledged aid in any academic undertaking. In the event that students witness a violation of the Honor System, they are obligated to take action consistent with their own sense of honor. The task of instructing students about their responsibilities under the Honor System resides with the Student Judiciary Board, a five-member body, which also conducts hearings and recommends action to the Dean in the event of a reported violation. The provisions and administration of the Honor System and other explanatory information are published in the Bowdoin College Student Handbook.

Board members for 1988-1989 are: Ann M. St. Peter '89, *Chair*; Brandon S. Sweeney '89, *Vice-Chair*; Luis E. Clemens '89, Paul D. Popeo '90, Gilberte R. Seymour '90. Alternates: Halley K. Harrisburg '90, Glenn S. Waters '89.

Social Code: The responsibility for creating a harmonious community among students with different backgrounds and conflicting personal values rests, in large part, with students themselves. Conflicts arising from these tensions and other individual indiscretions are adjudicated through the Bowdoin College Social Code. This unique code of conduct resulted from the cooperative efforts of faculty and students, and it governs undergraduate behavior at the College.

Similar to the Honor Code, students must subscribe to the Social Code at registration. The code clearly states that "The success of the Social Code requires the active commitment of all members of the community to the principles on which life at Bowdoin is based." When instances of suspected

misconduct occur, the code recommends an informal resolution, initially. Persistent and serious violations of this Social Code may be brought to the attention of the Dean of Students and to the Student Judiciary Board. Specific provisions and administration of the Social Code are found in the Student Handbook.

Living and Dining Accommodations: The College provides living and dining accommodations for its students. Entering freshmen must reside in college-owned facilities. Most students dine at Moulton Union or Wentworth Hall. Those electing to join coeducational fraternities may take their meals at the fraternity house. Students who request and accept room accommodations in the fall are obligated to pay a full academic year's rent for those accommodations. Further, students who live in campus dormitories or fraternities are required to maintain a regular board contract with the Centralized Dining Service. Students living in College apartments are not required to take a regular board contract. The fraternity chapter houses furnish dining accommodations for their members and living accommodations for a proportion of the sophomore and junior classes (the final arrangements for living quarters being contingent upon the size of enrollment and other factors).

Moulton Union: The Union serves as the community center for the College.

The main lounge is arranged for informal use as well as college gatherings: lectures, recitals, receptions, and banquets. The Lancaster Lounge, in the wing opposite the main lounge, and a smaller lounge add flexibility to the main floor area. Also on this floor are the information desk, and the offices of the director of the union, the director of events, the student activities coordinator, and the campus scheduling supervisor.

A large, self-service bookstore, which features a broad selection of paperbacks, is located in the southeast corner on the main floor and supplies textbooks and sundries to members of the College.

Extracurricular activities such as the Student Executive Board, Student Union Committee, the Camera Club, and WBOR have headquarters in the Union. The Career Services Office is on the second floor of the building.

On the lower floor, food service is provided in a variety of dining rooms, one of which serves as a banquet room for groups of less than one hundred. The Bear Necessity, opened in 1981, provides an informal gathering place for members of the college community. A light supper menu and entertainment are available. Also on this floor are a game room, a darkroom, a mail room, a student-operated used bookstore, and an automated bank teller machine.

The formulation of policies and the planning of the many-sided program of activities are the responsibility of the student activities coordinator and

the Student Union Committee. By sponsoring concerts, art exhibitions, tournaments, and other entertainments, the committee contributes to the social life of the entire college community.

Coeducational Fraternities: Approximately 40 percent of all Bowdoin students join one of the coeducational fraternities at some time in their career at the College. Local membership is open to all undergraduates, however, some national fraternities do not recognize women members. One-third of the upperclass fraternity members normally live in the fraternity houses, which are located adjacent to the campus and are independently owned and operated by alumni house corporations. Most other members live in college housing, but frequently eat meals in their fraternity dining rooms. All Bowdoin social and safety regulations apply to fraternity members.

Fraternities are an important part of the undergraduate life of the College, particularly for members, providing a focus for social activities. In addition, fraternity members enjoy many benefits derived from the sharing of educational concerns and daily living experiences within the organizations. Membership affords students an opportunity to assume significant responsibilities in self-governance within the fraternity organizations, and offers exposure to the history and traditions of the fraternities and the College.

Student Executive Board: Student social life at Bowdoin, the operation of student organizations, and the canvassing of student opinion to advise faculty and administrators on issues of general campus concern are entrusted to the student governance. Undergraduate self-government is vested in the Student Executive Board, which makes recommendations about student affairs to the student body and to the faculty. In addition, the Student Executive Board participates in the broader governance of the campus through representatives chosen by the board to be members of the various committees of the faculty and the Governing Boards.

Student Judiciary Board: The Student Judiciary Board is responsible for maintaining college standards of behavior through the enforcement of the Honor System and the Social Code. The board conducts administrative hearings on suspected misconduct and renders its findings to the dean of students in the form of recommendations. The board comprises three seniors and two juniors, all selected by the Student Judiciary Board with the approval of the Student Executive Board.

Student Representatives to Committees of the Faculty and Governing Boards: Most of the committees of the faculty and Governing Boards have invited student representatives to be voting members and to sit with them in their deliberations. This representation has facilitated the exchange of information and points of view between the various constituencies of the College.

Board of Proctors: The general comfort of residence hall residents, informal peer counseling, and the maintenance of order in the residence halls are the responsibility of the proctors, who are appointed by the assistant dean of students.

Organizations

Afro-American Society: The Afro-American Society, formed in 1968, was created to preserve, establish, and promote the Afro-American heritage within the Bowdoin community. Educational, cultural, and social activities are generally focused on the special experiences of Afro-Americans. Membership is available to all students who share similar interests. The general public is invited to participate in the Afro-American Society's varied activities throughout the year. In cooperation with student and faculty groups, the society has regularly sponsored educational programs, cultural expressions, and general entertainment for the benefit of the entire community. The Society is instrumental in the recruitment of black students and assists black freshmen in making the adjustment to College life.

Alcohol Peer Advisers: The Alcohol Peer Advisers are specially trained students who have been given accurate information about alcohol and its effects on fellow students, friends, and family. APAs are willing to listen to fellow students and can act as a referral link to other resources available on campus and in the community. APAs have also developed an outreach program with the goal of educating the Bowdoin community about alcohol-related issues.

Amnesty International: Amnesty International is a campus chapter of the Nobel Prize-winning human rights organization. In addition to working for the release of prisoners of conscience, the group is concerned with promoting human rights education throughout the campus.

Asian Interest Group: The purpose of the group is to deal with Asian issues that arise in the Bowdoin College community. The group works closely with the various offices of the administration to discuss admissions, student life, and curriculum policies; to help students adjust to college life; and to promote Asian-American awareness.

Bowdoin Dance Group: The group sponsors visiting performers, gives informal concerts or lecture/demonstrations, and presents a major spring performance of student works.

Bowdoin Film and Video Society: The BFS sponsors films throughout the school year. Some of the box office proceeds are used to buy films for the permanent collection.

Bowdoin Friendship Program: The program is designed to help familiarize incoming freshmen with Bowdoin on a personal level. Incoming freshmen are paired with an upperclassman who is expected to be available for advice and friendship throughout the freshman year.

Bowdoin Literary Society: The group sponsors lectures, poetry readings, and other events centered around literature.

The Bowdoin Review: *The Bowdoin Review* is a student essay magazine published twice in the academic year. Essays on any subject will be considered for publication.

Bowdoin Rugby Football Club: The club sponsors rugby matches with teams from other colleges and independent teams.

Bowdoin Women's Association: The BWA sponsors lectures on topics of interest to the entire college community as well as informal gatherings where Bowdoin women can get to know one another and discuss their Bowdoin experiences. The BWA has an office in the Women's Resource Center at 24 College Street.

Bugle: The *Bugle* is the college yearbook.

Camera Club: This informal organization provides activities and collaboration for Bowdoin's many student photographers.

Chapel Talks Program: Organized and directed by students, the program offers an opportunity for members of the community to meet weekly in the Chapel to contemplate and question talks delivered on a wide variety of topics.

College Republicans: A conservative political organization open to students of any and all party affiliations. The group sponsors speakers, has social activities, and publishes the *Patriot*.

Croquet at Bowdoin: This co-ed club not only plays croquet but fosters discussion of the sport.

Gay/Lesbian-Straight Alliance: The group provides an avenue for the discussion of relationships, families, love, and sexuality, and establishes a social and political support network for nonheterosexual participants. The alliance presents a number of films and lectures each year.

Interfraternity Council: The presidents of the fraternities meet regularly to discuss common issues and to review ways in which fraternities at Bowdoin may contribute more effectively to undergraduate life.

International Club: The club sponsors a broad range of intercultural events, including dances, lectures, and dinners, and helps facilitate exchange

between students of varying backgrounds with international interests. The Club also manages 30 College Street as the International House.

Huntington Club: The club sponsors birdwatching field trips and lectures.

Kamerling Society: Named in honor of the late Samuel E. Kamerling, Charles Weston Pickard Professor of Chemistry, the society is Bowdoin's student chapter affiliated with the American Chemical Society. The society sponsors lectures, films, and seminars for the college community.

Masque and Gown: This college dramatic organization has for more than eighty seasons provided undergraduates with opportunities to give practical expression to their interest in the theater. The Executive Committee produces full-length and one-act plays and sponsors the annual student-written one-act play contest; the committee also uses various experimental production techniques. Under the direction of the director of theater and housed in Pickard Theater, the Masque and Gown offers many opportunities for those interested in playwriting, scene design and construction, acting, and business management and publicity.

Music: Music activities include the Meddiebempsters, a men's augmented double quartet; the Miscellania, a women's augmented double quartet; the What Four, a barbershop quartet; the Bowdoin Swing Band; the Wind Ensemble; the Chamber Choir; the Chorale; the Bowdoin Precision Marching Band; and the Community Orchestra.

Orient: The *Bowdoin Orient*, the college newspaper, is now in its 117th year of continuous publication. There are opportunities for freshmen as reporters and for newcomers at the news desk, and advancement on the staff is rapid for those with a flair for journalism. Students interested in the business management of the newspaper will also find opportunities for work and advancement. The club also provides leadership training workshops for members of the college community.

Outing Club: Organized in 1948, the Outing Club sponsors a program of outdoor activities including rock climbing, hiking, cycling, canoeing, and skiing.

Paracelsus Society: The organization is a biological and natural science society which presents lectures, seminars, and films.

The Peer Relations Support Group (PRSG): The members of this group have been trained in the issues surrounding sexual harassment and interpersonal relationships. PRSG's purpose is to encourage healthy relationships and interpersonal communication and consideration among members of the Bowdoin community. The members organize events that pro-

mote campus awareness and are also available to provide information, one-on-one peer counseling, or crisis intervention.

Quill: The *Quill* is the college literary publication and is normally published once each semester. Each issue contains articles in all fields of student literary interest: short stories, essays, poems, and reviews. Contributions are welcomed from all members of the College.

Radio: In WBOR, "Bowdoin-on-Radio," the College has a well-equipped FM radio station as the result of a gift from the Class of 1924. Situated on the second floor of the Moulton Union, the student-operated station broadcasts daily when the College is in session. Positions as announcers, engineers, newscasters, and sportscasters are numerous and open to any student who has an FCC Third Class Permit with broadcast endorsement.

Religious Life: Religious activities at Bowdoin are organized by the students. In recent years the Bowdoin Christian Fellowship, the Bowdoin Jewish Organization, and the Newman Apostolate have been active. Each has planned activities appropriate to its membership.

Russian Club: The club sponsors concerts of Russian music and showings of Soviet films, holds Russian dinners, and leads discussions of current affairs involving the USSR in its efforts to promote Russian and East European culture on the Bowdoin campus.

Speech and Parliamentary Debate Society: The society promotes intercollegiate and intramural debate, campus discussion, and the development of rhetorical, analytical, and argumentative skills.

Struggle and Change: A political organization whose goal is to raise issues on campus about the larger society in which we live. Such issues include nuclear power and apartheid. The group sponsors speakers, has weekly discussions, and publishes *To the Root*, an alternative political newspaper.

Student Union Committee: This group is a committee of elected members which organizes, coordinates, and sponsors a number of campus-wide social activities including lectures, dances, parties, and concerts.

Thymes: The *Bowdoin Thymes* is the daily newspaper/calendar of the College. It is a publication of the Office of Public Relations and Publications and employs two or three undergraduates as coeditors. Each weekday the *Thymes* is printed and delivered to dormitories, fraternities, and other buildings on campus.

Voluntary Service Programs: A wide range of social service activities is undertaken by students. Their voluntary nature is their essential characteris-

tic. Students participating in them receive no compensation or academic credit. Each of the major programs is coordinated by a student leader, and the smaller or individual activities are organized by the voluntary service programs coordinator.

Currently these activities include the Big Brother-Big Sister program, which provides companionship and activities for children of elementary and junior high school age; a program of assistance to area retarded citizens; programs which seek to help the elderly and infirm in the region; the Regional Hospital Program for those considering careers in medicine; a school tutoring program; Bowdoin Undergraduate Teachers, which is of particular interest to those interested in a teaching career since it provides opportunities for direct participation in local school classrooms; the Bath Children's Home Program, in which students offer friendship and academic assistance to youngsters living in a group home; Project BASE (Bowdoin and Sweetser exchange), which offers an opportunity to work with emotionally disturbed children at a residential school, and the Maine Volunteer Lawyers Project, in which trained students offer preliminary legal information to low income Portland area residents.

Wherefore Art: This organization sponsors a variety of events focused on art, including films, lectures, museum trips, and discussions.

Young Democrats: The group is a partisan organization which welcomes people from all parts of the political spectrum to participate. The group's goal is to promote political awareness on campus by sponsoring speakers and debates.

Career Services

THE Office of Career Services (OCS) complements the academic mission of the College. By increasing students' awareness of the skills they are developing through a liberal arts education, career counselors reinforce the academic focus of students' experiences at Bowdoin. At the same time, OCS seeks to dispel misconceptions about the connection between specific courses or majors and career options.

Major goals of OCS are to help undergraduates and alumni/ae better understand themselves in relation to the world of work and to introduce them to the process of career planning. In so doing, OCS assists students in their transition to work or graduate study and prepares them to deal with later career and life decisions.

A staff of five is available for individual career counseling. Workshops and presentations throughout the academic year offer assistance in identifying skills, selecting a major, locating internship and summer job prospects, and refining job hunting techniques. Information is available on more than 1,000 summer and semester internships. In counseling style and program content, OCS addresses the needs of those with diverse interests, attitudes, and expectations. Each year, more than fifty companies, sixty graduate schools, and an increasing number of secondary schools participate in on-campus recruiting programs. Bowdoin is also a member of interviewing consortia in Maine, Boston, and New York City, which affords additional employment interviews for our undergraduates.

Alumni and parents are regularly involved both on and off campus in special programs designed to enhance students' understanding of the job market and to broaden their awareness of career options. A fall Career Day, presentations on specific career fields, and on-campus interviews highlight this involvement. In addition, a computerized network allows the staff to refer students to alumni/ae and parents in locations and professions of particular interest.

The office continually updates two resource centers, located in the Moulton Union and in the Department of Education, which house materials on specific careers, companies and organizations, graduate schools, and internship opportunities. A weekly newsletter publicizes all OCS events and programs in addition to internship and job openings.

Position of Intern: Each year the College extends opportunities for graduating seniors to serve and to learn in one-year intern positions. These posts have been available within the following offices: Dean of Students, Admissions, Career Services, Financial Aid, Development, and Public Relations and Publications. Not only do the interns benefit from a broad administrative exposure, including a variety of assignments, but the College gains from the availability of opinions and experiences of these recent students in forming new policies, procedures, and programs.

Lectureships

THE REGULAR INSTRUCTION of the College is supplemented each year by ten or twelve major lectures, in addition to lectures, panel discussions, and other presentations sponsored by the various departments of study and undergraduate organizations.

John Warren Achorn Lectureship (1928)

Established by Mrs. John Warren Achorn as a memorial to her husband, a member of the Class of 1879. The income is used for lectures on birds and bird life.

Charles F. Adams Lectureship (1978)

Established by the bequest of Charles F. Adams of the Class of 1912. To support a lectureship in political science and education.

Albert C. Boothby Memorial Fund (1977)

Established by the family and friends of Albert C. Boothby of the Class of 1929. Terms to be established.

Chemistry Lecture Fund (1939)

Established by a vote of the Governing Boards. For Department of Chemistry special lectures in chemistry.

Dan E. Christie Mathematics Lecture Fund (1976)

Established by family, friends, colleagues, and former students in memory of Dan E. Christie of the Class of 1937, a member of the faculty for thirty-three years and Wing Professor of Mathematics from 1965 until his death in 1975. To sponsor lectures under the auspices of the Department of Mathematics.

Annie Talbot Cole Lectureship (1907)

Established by Mrs. Calista S. Mayhew in memory of her niece, Mrs. Samuel Valentine Cole. To contribute "to the ennoblement and enrichment of life by standing for the idea that life is a glad opportunity. It shall, therefore, exhibit and endeavor to make attractive the highest ideals of character and conduct, and also, insofar as possible, foster an appreciation of the beautiful as revealed through nature, poetry, music, and the fine arts."

The Elliott Oceanographic Fund (1973)

Established by the Edward Elliott Foundation and members of the Elliott family in memory of Edward L. Elliott, a practicing geologist and mining engineer who expressed a lifelong interest in science and the sea. To support oceanographic education, in its widest definition, for Bowdoin

students. It is expected that at least part of the fund will be used to support the Elliott Lectures in Oceanography, which were inaugurated in 1971.

Alfred E. Golz Lecture Fund (1986)

Established by Ronald A. Golz of the Class of 1956 in memory of his father. To provide a lecture by an eminent historian or humanitarian to be scheduled close to the November 21 birthday of Alfred E. Golz.

Cecil T. and Marion C. Holmes Mathematics Lecture Fund (1977)

Established by friends, colleagues, and former students to honor Cecil T. Holmes, Ph.D., a member of the faculty for thirty-nine years and Wing Professor of Mathematics Emeritus since his retirement in 1964. To provide lectures under the sponsorship of the Department of Mathematics.

Mayhew Lecture Fund (1923)

Established by Mrs. Calista S. Mayhew. To provide lectures on bird life and its effect on forestry.

Charles Weston Pickard Lecture Fund (1961)

Established by John Coleman Pickard of the Class of 1922, in memory of his grandfather, a member of the Class of 1857. Beginning with the academic year 1963-1964, and every four years thereafter, the income is used to provide a lecture in the field of journalism in its broadest sense. "By journalism is meant lines of communication with the public, whether through newspapers, radio, television, or other recognized media."

Kenneth V. Santagata Memorial Lecture Fund (1982)

Established by family and friends of Kenneth V. Santagata of the Class of 1973. To provide at least one lecture each term, rotating in the arts, humanities, and social sciences, with lecturers to be recognized authorities in their respective fields, to present new, novel, or non-conventional approaches to the designated topic in the specified category.

Edith Lansing Koon Sills Lecture Fund (1962)

Established by the Society of Bowdoin Women to honor Mrs. Kenneth C. M. Sills, the wife of a former president of Bowdoin College.

The Harry Spindel Memorial Lectureship (1977)

Established by the gift of Rosalyne Spindel Bernstein and Sumner Thurman Bernstein in memory of her father, Harry Spindel, as a lasting testimony to his lifelong devotion to Jewish learning. To support annual lectures in Judaic studies or contemporary Jewish affairs.

The Jasper Jacob Stahl Lectureship in the Humanities (1970)

Established by the bequest of Jasper Jacob Stahl of the Class of 1909. "To support a series of lectures to be delivered annually at the College by some distinguished scholarly and gifted interpreter of the Art, Life, Letters,

Philosophy, or Culture, in the broadest sense, of the Ancient Hebraic World, or of the Ancient Greek World or of the Roman World, or of the Renaissance in Italy and Europe, or of the Age of Elizabeth I in England, or that of Louis XIV and the Enlightenment in France, or of the era of Goethe in Germany.”

Tallman Lecture Fund (1928)

Established by Frank G. Tallman, an honorary graduate in 1935, as a memorial to the Bowdoin members of his family. For a series of lectures to be delivered by persons selected by the faculty. In addition to offering a course for undergraduates, the Visiting Professor on the Tallman Foundation gives public lectures on the subject of special interest.

Prizes and Distinctions

THE BOWDOIN PRIZE: A fund established as a memorial to William John Curtis, LL.D., of the Class of 1875, by his wife and children. The prize, four-fifths of the total income not to exceed \$10,000, is to be awarded "once in each five years to the graduate or former member of the College, or member of its faculty at the time of the award, who shall have made during the period the most distinctive contribution in any field of human endeavor. The prize shall only be awarded to one who shall, in the judgment of the committee of award, be recognized as having won national and not merely local distinction, or who, in the judgment of the committee, is fairly entitled to be so recognized." (1928)

The first award was made in 1933 and the most recent in 1985. Recipient of the award in 1985 was Joan Benoit Samuelson, A.B., of the Class of 1979.

THE PRESERVATION OF FREEDOM FUND: A fund established by Gordon S. Hargraves of the Class of 1919 to stimulate understanding and appreciation of the rights and freedoms of the individual, guaranteed under the Constitution of the United States. The prize is to be awarded to a student, a member of the faculty, or a group of Bowdoin alumni making an outstanding contribution to the understanding and advancement of human freedoms and the duty of the individual to protect and strengthen these freedoms at all times. (1988)

The first award was made in 1988 to William B. Whiteside, Frank Munsey Professor of History.

UNDERGRADUATE PRIZES

Prizes in General Scholarship

Brooks-Nixon Prize Fund: A fund established by Percy Willis Brooks, of the Class of 1890, and Mary Marshall Brooks. The annual income is awarded each year as a prize to the best Bowdoin candidate for selection as a Rhodes scholar. (1975)

Brown Memorial Scholarships: A fund for the support of four scholarships in Bowdoin College given by the Honorable J. B. Brown, of Portland, in memory of his son, James Olcott Brown, A.M., of the Class of 1856. According to the provisions of this foundation, a prize will be paid annually to the best scholar in each undergraduate class who shall have graduated at the high school in Portland after having been a member thereof not less than one year. The awards are made by the City of Portland upon recommendation of the College. (1865)

Dorothy Haythorn Collins Award: An award from the estate of Dorothy Haythorn Collins and from her family to the Society of Bowdoin Women. Each year the society selects a department from the sciences, the social studies, and the humanities. The selected department chooses a student to honor by purchasing a book and placing it with a nameplate in the department library. The student also receives a book and certificate of merit. (1985)

Almon Goodwin Prize Fund: This fund was established by Mrs. Maud Wilder Goodwin in memory of her husband, Almon Goodwin, of the Class of 1862. The annual income is awarded to a member of Phi Beta Kappa chosen by vote of the Board of Trustees of the College at the end of the recipient's junior year. (1906)

George Wood McArthur Prize: A fund bequeathed by Almira L. McArthur, of Saco, in memory of her husband, George Wood McArthur, of the Class of 1893. The annual income is awarded as a prize to that member of the graduating class who, coming to Bowdoin as the recipient of a prematriculation scholarship, shall have attained the highest academic standing among such recipients within the class. (1950)

Leonard A. Pierce Memorial Prize: A prize, established by friends and associates. It is awarded annually to that member of the graduating class who is continuing his or her education in an accredited law school and who attained the highest scholastic average during his or her years in college. It is paid to the recipient upon enrollment in law school. (1960)

Commencement Prizes

DeAlva Stanwood Alexander Prize: Established by DeAlva Stanwood Alexander, LL.D., of the Class of 1870, this fund furnishes two prizes for excellence in select declamation. (1908)

Class of 1868 Prize: Contributed by the Class of 1868, this prize is awarded for a written and spoken oration by a member of the senior class. (1868)

Goodwin Commencement Prize: Established by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, the prize is awarded for a written or oral presentation at Commencement. (1882)

Departmental Prizes

ART

Art History Junior-Year Prize: A prize funded annually by a donor wishing to remain anonymous and awarded to a student judged by the

Department of Art to have achieved the highest distinction in the major program in art history and criticism at the end of the junior year. (1979)

Art History Senior-Year Prize: A prize established by a donor wishing to remain anonymous and awarded to a graduating senior judged by the Department of Art to have achieved the highest distinction in the major in art history and criticism. (1982)

Anne Bartlett Lewis Memorial Fund: The annual income of a fund for demonstrations of excellence in art history and creative visual arts by two students enrolled as majors in the Department of Art. The fund was established by her husband, Henry Lewis, and her children, William H. Hannaford, David Hannaford, and Anne D. Hannaford. (1981)

BIOLOGY

Copeland-Gross Biology Prize: A prize named in honor of two former Josiah Little Professors of Natural Science, Manton Copeland and Alfred Otto Gross, Sc.D., is awarded to that graduating senior who has best exemplified the idea of a liberal education during the major program in biology. (1972)

Donald and Harriet S. Macomber Prize in Biology: A fund established by Dr. and Mrs. Donald Macomber in appreciation for the many contributions of Bowdoin in the education of members of their family—David H. Macomber '39, Peter B. Macomber '47, Robert A. Zottoli '60, David H. Macomber, Jr. '67, and Steven J. Zottoli '69. The income of the fund is to be awarded annually as a prize to the outstanding student in the Department of Biology. If, in the opinion of the department, in any given year there is no student deemed worthy of this award, the award may be withheld and the income for that year added to the principal of the fund. (1967)

James Malcolm Moulton Prize in Biology: The income of a fund given by former students and other friends in honor of the George Lincoln Skolfield, Jr., Professor of Biology Emeritus, to provide a book prize to be awarded annually to the outstanding junior majoring in biology, as judged by scholarship and interest in biology. At the discretion of the Department of Biology, this award may be made to more than one student or to none in a given year. (1984)

CHEMISTRY

Philip Weston Meserve Fund: A prize in memory of Professor Philip Weston Meserve, of the Class of 1911, "to be used preferably to stimulate interest in Chemistry." (1941)

CLASSICS

Hannibal Hamlin Emery Latin Prize: A prize is awarded to a member of the junior or senior class for proficiency in Latin. (1922)

Nathan Goold Prize: A prize established by Abba Goold Woolson, of Portland, in memory of her grandfather. It is awarded to that member of the Senior Class who has, throughout the college course, attained the highest standing in Greek and Latin studies. (1922)

Sewall Greek Prize: A prize given by Jotham Bradbury Sewall, S.T.D., of the Class of 1848, formerly professor of Greek in the College, is awarded to the member of the sophomore class who sustains the best examination in Greek. (1879)

Sewall Latin Prize: A prize given by Professor Sewall is awarded to the member of the sophomore class who sustains the best examination in Latin. (1879)

ECONOMICS

Noyes Political Economy Prize: A prize established by Crosby Stuart Noyes, A.M. (Bowdoin, 1887), is awarded to the best scholar in political economy. (1897)

ENGLISH

Bradbury Debating Prize: The annual income of a fund given by James Ware Bradbury, LL.D., of the Class of 1825, is awarded for excellence in debating. First team, two-thirds of the income; second team, one-third of the income. (1901)

Brown Competition Prizes: Two prizes from the annual income of a fund established by Philip Greely Brown, A.M., of the Class of 1877, in memory of Philip Henry Brown, Esq., A.M., of the Class of 1851, are offered to members of the senior class for excellence in extemporaneous English composition. (1874)

Hiland Lockwood Fairbanks Prize Fund: This fund was established by Captain Henry Nathaniel Fairbanks, of Bangor, in memory of his son Hiland Lockwood Fairbanks, of the Class of 1895. Of the annual income one-half is awarded as a single prize for excellence in **English 11** and the remaining one-half, in a two-to-one ratio, is awarded as first and second prizes to the two outstanding students in **English 10**. (1909)

Hawthorne Prize: The income of a fund given in memory of Robert Peter Tristram Coffin, Litt.D., of the Class of 1915, Pierce Professor of Literature, and in memory of the original founders of the Hawthorne Prize: Nora Archibald Smith and Kate Douglas Wiggin, Litt.D. It is awarded each year to the author of the best short story. This competition is open to members of the sophomore, junior, and senior classes. (1903)

Horace Lord Piper Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, in memory of Major Horace Lord Piper, of

the Class of 1863. It is awarded to that member of the sophomore class who presents the best "original paper on the subject calculated to promote the attainment and maintenance of peace throughout the world, or on some other subject devoted to the welfare of humanity." (1923)

Stanley Plummer Prizes: The annual income of a fund established by Stanley Plummer, of the Class of 1867, is awarded to the two outstanding students in **English 12**. First and second prizes are awarded in a two-to-one ratio. (1919)

Poetry Prize: The annual income of a fund is given each semester for the best poem on Bowdoin written by an undergraduate. (1926)

Pray English Prize: A prize given by Thomas Jefferson Worcester Pray, M.D., of the Class of 1844, is awarded to the best scholar in English literature and original English composition. (1889)

Forbes Rickard, Jr., Poetry Prize: A prize given by a group of alumni of the Bowdoin chapter of Alpha Delta Phi Fraternity in memory of Forbes Rickard, Jr., of the Class of 1917, who lost his life in the service of his country, awarded to the undergraduate writing the best poem. (1919)

David Sewall Premium: A prize is awarded to a member of the freshman class for excellence in English composition. (1795)

Mary B. Sinkinson Short Story Prize: A prize established by John Hudson Sinkinson, of the Class of 1902, in memory of his wife, Mary Burnett Sinkinson, is awarded each year for the best short story written by a member of the junior or senior class. (1961)

Bertram Louis Smith, Jr., Prize: A fund established from the bequest of Bertram Louis Smith, in memory of his son, a member of the Class of 1903, to encourage excellence of work in English literature. The annual income of this fund is awarded by the department to a member of the junior class who has completed two years' work in English literature. Ordinarily, it is awarded to a student majoring in English, and performance of major work as well as record in courses is taken into consideration. (1925)

GERMAN

The Old Broad Bay Prizes in Reading German: The income from a fund given by Jasper J. Stahl, Litt.D., of the Class of 1909, and by others, to be awarded to students who in the judgment of the department have profited especially from their instruction in German. The fund is established as a living memorial to those remembered and unremembered men and women from the valley of the Rhine who in the eighteenth century founded the first German settlement in Maine at Broad Bay, now Waldoboro.

(1964)

The German Consular Prize in Literary Interpretation: This prize was initiated by the German Consulate from whom the winner will receive a certificate of merit and a book prize in addition to a small financial prize which will be awarded from the income of the fund. The prize will be awarded annually to the senior German major who wins a competition requiring superior skills in literary interpretation. (1986)

GOVERNMENT AND LEGAL STUDIES

Philo Sherman Bennett Prize Fund: This fund was established by William Jennings Bryan from trust funds of the estate of Philo Sherman Bennett, of New Haven, Connecticut. The income is used for a prize for the best essay discussing the principles of free government. Competition is open to juniors and seniors. (1905)

Jefferson Davis Award: A prize consisting of the three-volume *Jefferson Davis* by Hudson Strode and the annual income of a fund is awarded to the student excelling in constitutional law. (1973)

Fessenden Prize in Government: A prize given by Richard Dale, of the Class of 1954, is awarded by the Department of Government to that graduating senior who as a government major has made the greatest improvement in studies in government, who has been accepted for admission into either law or graduate school or has been accepted for employment in one of certain federal services, and who is a United States citizen. (1964)

HISTORY

Class of 1875 Prize in American History: A prize established by William John Curtis, LL.D., of the Class of 1875, is awarded to the student who writes the best essay and passes the best examination on some assigned subject in American history. (1901)

MATHEMATICS

Edward Sanford Hammond Mathematics Prize: A book is awarded on recommendation of the Department of Mathematics to a graduating senior who is completing a major in mathematics with distinction. Any balance of the income from the fund may be used to purchase books for the department. The prize honors the memory of Edward S. Hammond, for many years Wing Professor of Mathematics, and was established by his former students at the time of his retirement. (1963)

Smyth Mathematical Prize: The gift of Henry Jewett Furber, of the Class of 1861, named by him in honor of Professor William Smyth. A prize is given to that student in each sophomore class who obtains the highest grades in mathematics courses during the first two years. The prize is awarded by the faculty of the Department of Mathematics, which will take into consideration both the number of mathematics courses taken and the level of diffi-

culty of those courses in determining the recipient. The successful candidate receives one-third of the prize at the time the award is made. The remaining two-thirds is paid to him or her in installments at the close of each term during junior and senior years. If a vacancy occurs during those years, the income of the prize goes to the member of the winner's class who has been designated as the alternate recipient by the department. (1876)

MUSIC

Sue Winchell Burnett Music Prize: A prize established by Mrs. Rebecca P. Bradley in memory of Mrs. Sue Winchell Burnett. It is awarded upon recommendation of the Department of Music to that member of the senior class who has majored in music and has made the most significant contribution to music while a student at Bowdoin. If two students make an equally significant contribution, the prize will be divided equally between them. (1963)

PHILOSOPHY

Philip W. Cummings Philosophy Prize: A prize awarded to the most deserving student in the Department of Philosophy. The prize was given by Gerard L. Dube of the Class of 1955 in memory of his friend and classmate. (1984)

PHYSICS

Edwin Herbert Hall Physics Prize: A prize, named in honor of Edwin Herbert Hall, LL.D., of the Class of 1875, the discoverer of the Hall Effect, is awarded each year to the best sophomore scholar in the field of physics. (1953)

Noel C. Little Prize in Experimental Physics: A prize named in honor of Noel C. Little, Sc.D., of the Class of 1917, professor of physics emeritus, and Josiah Little Professor of Natural Science Emeritus, to be awarded to a graduating senior who has distinguished himself or herself in experimental physics. (1968)

PSYCHOLOGY

Frederic Peter Amstutz Memorial Prize: A prize established by members of his family for a graduating senior who has achieved distinction as a psychology major. (1986)

RELIGION

Edgar Oakes Achorn Prize Fund: The income of a fund is distributed as prizes to the winning team in an annual debate between the sophomore and freshman classes. If this debate should fail in interest or scholastic benefit, the prizes may, at the discretion of the faculty, be withdrawn, and the income awarded annually as a prize for the best essay by a member of the sophomore

or freshman classes on "Chapel Exercises, Their Place at Bowdoin"; or on any other subject germane to the place of religion in a liberal education.

(1932)

Lea Ruth Thumim Biblical Literature Prize: A prize given by Carl Thumim in memory of his wife, Lea Ruth Thumim, is awarded each year by the Department of Religion to the best scholar in biblical literature. (1959)

ROMANCE LANGUAGES

Philip C. Bradley Spanish Prize: A prize established by classmates and friends in memory of Philip C. Bradley, of the Class of 1966, is awarded to outstanding students in Spanish languages and literature. (1982)

Goodwin French Prize: A prize given by the Reverend Daniel Raynes Goodwin, D.D., of the Class of 1832, is awarded to the best scholar in French. (1890)

Eaton Leith French Prize: The annual income of a fund awarded to that member of the sophomore or junior class who, by his or her proficiency and scholarship, achieves outstanding results in the study of French literature. The prize was established in 1962 and endowed in 1966 by James M. Fawcett III, of the Class of 1958, to honor Eaton Leith, professor of Romance languages emeritus. (1962)

Charles Harold Livingston Honors Prize in French: An award to encourage independent scholarship in the form of honors theses in French. The fund was established by former students of Charles Harold Livingston, Longfellow Professor of Romance Languages, upon the occasion of his retirement. (1956)

SCIENCE

Sumner Increase Kimball Prize: A prize established by Sumner Increase Kimball, Sc.D., of the Class of 1855, is awarded to that member of the senior class who has "shown the most ability and originality in the field of the Natural Sciences." (1923)

SOCIOLOGY AND ANTHROPOLOGY

Matilda White Riley Prize in Sociology and Anthropology: A prize for an outstanding research project by a major in honor of Matilda White Riley b. 1872, the Daniel B. Fayerweather Professor of Political Economy and Sociology Emerita, who established the joint department of sociology and anthropology and a tradition of teaching through sociological research. (1987)

THEATER ARTS

Abraham Goldberg Prize: The income from a bequest of Abraham Goldberg, this prize is awarded annually to that member of the senior class

who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of designing or directing.

(1960)

Masque and Gown Figurine: A figurine, "The Prologue," carved by Gregory Wiggin, is presented annually to the author of the prize-winning play in the One-Act Play contest, and held by the winner until the following contest.

(1937)

Masque and Gown One-Act Play Prizes: Cash prizes are awarded annually for excellence in various Masque and Gown activities, including playwriting, directing, and acting.

(1934)

Alice Merrill Mitchell Prize: A prize given by Wilmot Brookings Mitchell, L.H.D., of the Class of 1890, Edward Little Professor of Rhetoric and Oratory, in memory of his wife, Alice Merrill Mitchell, is awarded annually to that member of the senior class who, in the opinion of a faculty committee headed by the director of theater, has shown, in plays presented at the College during the two years preceding the date of award, the most skill in the art of acting.

(1951)

William H. Moody '56 Prize: A fund established in memory of Bill Moody, who for many years was the theater technician and friend of countless students. The award is presented annually, if applicable, to one or more upperclassmen having made outstanding contributions to the theater through technical achievements accomplished in good humor. The award should be an appropriate memento of Bowdoin.

(1980)

George H. Quinby Award: Established in honor of "Pat" Quinby, for thirty-one years director of dramatics at Bowdoin College, by his former students and friends in Masque and Gown, the award is presented annually to one or more freshman members of Masque and Gown who make an outstanding contribution through interest and participation in Masque and Gown productions. The recipients are selected by the director of theater, the theater technician, and the president of Masque and Gown.

(1967)

Bowdoin Dance Group Award: An appropriate, inscribed dance memento to be awarded annually to an outstanding senior for contributions of dedicated work, good will, and talent, over the course of his or her Bowdoin career, in the lively, imaginative spirit of the Class of 1975, the first graduating class of Bowdoin dancers.

(1988)

Scholarship Award for Summer Study in Dance: A monetary award toward tuition costs at an accredited summer program of study in dance. To be awarded to a freshman with demonstrated motivation and exceptional

promise in dance technique or choreography, whose future work in dance, upon return, will enrich the Bowdoin program. (1988)

AWARDS IN ATHLETICS

Women's Basketball Alumnae Award: A bowl, inscribed with the recipient's name, given to the player who "best exemplifies the spirit of Bowdoin Women's Basketball, combining talent with unselfish play and good sportsmanship." The award is presented by Bowdoin alumnae basketball players. (1983)

Society of Bowdoin Women Athletic Award: An award presented each May to a member of a women's varsity team in recognition of her "effort, cooperation, and sportsmanship." Selection is made by a vote of the Department of Athletics and the dean of students. (1978)

Leslie A. Claff Track Trophy: A trophy presented by Leslie A. Claff, of the Class of 1926, to be awarded "at the conclusion of the competitive year to the outstanding performer in track and field athletics who, in the opinion of the Dean, the Director of Athletics, and the Track Coach, has demonstrated outstanding ability accompanied with those qualities of character and sportsmanship consistent with the aim of intercollegiate athletics in its role in higher education." (1961)

Annie L. E. Dane Trophy: Named in memory of the wife of Francis S. Dane, of the Class of 1896, and mother of Nathan Dane II, of the Class of 1937, Winkley Professor of Latin Language and Literature, the trophy is awarded each spring to a senior member of a varsity women's team who "best exemplifies the highest qualities of character, courage, and commitment to team play." (1978)

Francis S. Dane Baseball Trophy: A trophy presented to the College by friends and members of the family of Francis S. Dane, of the Class of 1896, is awarded each spring "to that member of the varsity baseball squad who, in the opinion of a committee made up of the Dean of the College, the Director of Athletics, and the Coach of Baseball, best exemplifies high qualities of character, sportsmanship, and enthusiasm for the game of baseball." (1965)

William J. Fraser Basketball Trophy: The William J. Fraser Basketball Trophy, presented by Harry G. Shulman, A.M. (Bowdoin 1971), in memory of William J. Fraser, of the Class of 1954, is awarded annually to that member of the basketball team who best exemplifies the spirit of Bowdoin basketball. The recipient is selected by the coach, the athletic director, and the dean of the College. (1969)

Winslow R. Howland Football Trophy: A trophy presented to the

College by his friends in memory of Winslow R. Howland, of the Class of 1929, is awarded each year to that member of the varsity football team who has made the most marked improvement on the field of play during the football season, and who has shown the qualities of cooperation, aggressiveness, enthusiasm for the game, and fine sportsmanship so characteristic of Winslow Howland. (1959)

Elmer Longley Hutchinson Cup: A cup given by the Bowdoin chapter of Chi Psi Fraternity in memory of Elmer Longley Hutchinson, of the Class of 1935, is awarded annually to a member of the varsity track squad for high conduct both on and off the field of sport. (1939)

J. Scott Kelnberger Memorial Ski Trophy: A trophy presented by the family and friends in honor and memory of J. Scott Kelnberger '83. (1985)

Samuel A. Ladd Tennis Trophy: A trophy presented by Samuel Appleton Ladd, Jr., of the Class of 1929, and Samuel Appleton Ladd III, of the Class of 1963, awarded to a member of the varsity team who during the year by his sportsmanship, cooperative spirit, and character has done the most for tennis at Bowdoin. The award winner's name is to be inscribed on the trophy. (1969)

George Levine Memorial Soccer Trophy: A trophy presented by Lieutenant Benjamin Levine, coach of soccer in 1958, is awarded to that member of the varsity soccer team exemplifying the traits of sportsmanship, valor, and desire. (1958)

Robert B. Miller Trophy: A trophy, given by former Bowdoin swimmers, in memory of Robert B. Miller, coach of swimming, is awarded annually "to the Senior who, in the opinion of the coach, is the outstanding swimmer on the basis of his contribution to the sport." Winners will have their names inscribed on the trophy and will be presented with bronze figurines. (1962)

Hugh Munro, Jr., Memorial Trophy: A trophy given by his family in memory of Hugh Munro, Jr., of the Class of 1941, who lost his life in the service of his country. It is inscribed each year with the name of that member of the Bowdoin varsity hockey team who best exemplifies the qualities of loyalty and courage which characterized the life of Hugh Munro, Jr. (1946)

Paul Nixon Basketball Trophy: Given to the College by an anonymous donor and named in memory of Paul Nixon, L.H.D., dean at Bowdoin from 1918 to 1947, in recognition of his interest in competitive athletics and sportsmanship, this trophy is inscribed each year with the name of the member of the Bowdoin varsity basketball team who has made the most

valuable contribution to this team through his qualities of leadership and sportsmanship. (1959)

Wallace C. Philoon Trophy: Given by Wallace Copeland Philoon, M.S., Major General, U.S.A., of the Class of 1905, this trophy is awarded each year to a nonletter winner of the current season who has made an outstanding contribution to the football team. The award is made to a man who has been faithful in attendance and training and has given his best efforts throughout the season. (1960)

William J. Reardon Memorial Football Trophy: A replica of this trophy, which was given to the College by the family and friends of William J. Reardon, of the Class of 1950, is presented each year to a senior on the varsity football team who has made an outstanding contribution to his team and his college as a man of honor, courage, and ability, the qualities which William J. Reardon exemplified at Bowdoin College on the campus and on the football field. (1958)

Reid Squash Trophy: A fund established in 1975 by William K. Simon-ton, of the Class of 1943, to be awarded annually to the member of the squash team who has shown the most improvement. The recipient is to be selected by the coach of the team, the director of athletics, and the dean of the College.

Harry G. Shulman Hockey Trophy: This trophy is awarded annually to that member of the hockey squad who has shown outstanding dedication to Bowdoin hockey. The recipient will be elected by a vote of the coach, the athletic director, and the dean of the College. (1969)

Lucy L. Shulman Trophy: Given by Harry G. Shulman, A.M. (Bowdoin 1971), in honor of his wife, this trophy is awarded annually to the outstanding woman athlete. The recipient will be selected by the director of athletics and the dean of the College. (1975)

Paul Tiemer, Jr., Men's Lacrosse Trophy: Given by Paul Tiemer, of the Class of 1928, in memory of his son Paul Tiemer, Jr., this trophy is awarded annually to the senior class member of the varsity lacrosse team who is judged to have brought the most credit to Bowdoin and to himself. The recipient is to be selected by the varsity lacrosse coach, the director of athletics, and the dean of the College. (1976)

David Berdan Wenigmann Memorial Wrestling Trophy: Given by Henry P. Bristol II, of the Class of 1976, in memory of his friend David Berdan Wenigmann, this trophy is awarded each year to the member of the varsity wrestling team who best exemplifies the qualities of character, courage, and enthusiasm for the sport of wrestling. The recipient is chosen by the

dean of the College and the director of athletics, with the advice of the wrestling coach. (1984)

Prizes in Extracurricular Activities

James Bowdoin Cup: This cup, given by the Alpha Rho Upsilon Fraternity, is awarded annually on James Bowdoin Day to the student who in his previous college year has won a varsity letter in active competition and has made the highest scholastic average among the students receiving varsity letters. In case two or more students should have equal records, the award shall go to the one having the best scholastic record during his or her college course. The name of the recipient is to be engraved on the cup and the cup retained for the following year by that college group (fraternity or nonfraternity) of which the recipient is a member. (1947)

Bowdoin Orient Prize: Six cash prizes are offered by the Bowdoin Publishing Company and are awarded each spring to those members of the *Bowdoin Orient* staff who have made significant contributions to the *Orient* in the preceding volume. (1948)

Paul Andrew Walker Prize Fund: Established in honor and memory of Paul Andrew Walker, of the Class of 1931, by his wife, Nathalie L. Walker, forty percent of the income of the fund is used to honor a member or members of the *Bowdoin Orient* staff whose ability and hard work are deemed worthy by the Award Committee chosen by the dean of the College. A bronze medal or an appropriate book, with a bookplate designed to honor Paul Andrew Walker, is presented to each recipient. (1982)

General R. H. Dunlap Prize: This fund was established by Katharine Wood Dunlap in memory of her husband, Robert H. Dunlap, Brigadier General, U.S.M.C. The annual income is to be awarded to the student who writes the best essay on the subject of "service." (1970)

Andrew Allison Haldane Cup: A cup given by fellow officers in the Pacific in memory of Captain Andrew Allison Haldane, USMCR, of the Class of 1941, awarded to a member of the senior class who has outstanding qualities of leadership and character. (1945)

Orren Chalmer Hormell Cup: A cup, given by the Sigma Nu Fraternity at the College, in honor of Orren Chalmer Hormell, Ph.D., D.C.L., DeAlva Stanwood Alexander Professor of Government, is awarded each year to a sophomore who, as a freshman, competed in freshman athletic competition as a regular member of a team, and who has achieved outstanding scholastic honors. A plaque inscribed with the names of all the cup winners is kept on display. (1949)

Lucien Howe Prize: A fund given by Lucien Howe, M.D., Sc.D., of the Class of 1870. Fifty percent of the income is awarded by the Faculty to that member of the Senior Class who as an undergraduate, by example and influence has shown the highest qualities of conduct and character. The remainder is expended by the president to improve the social life of the undergraduates. (1920)

Col. William Henry Owen Premium: An award established by Frederick Wooster Owen, M.D., in memory of his brother, a member of the Class of 1851, is made at Commencement to some graduating student recognized by his or her fellow students as a "humble, earnest, and active Christian." (1916)

Franklin Delano Roosevelt Cup: A cup, furnished by the Bowdoin chapter of Alpha Delta Phi Fraternity, is inscribed annually with the name of that member of the three lower classes whose vision, humanity, and courage most contribute to making Bowdoin a better college. (1945)

Abraxas Award

An engraved pewter plate is awarded to the school sending two or more graduates to the College, whose representatives maintain the highest standing during their freshman year. This award was established by the Abraxas Society. (1915)

PHI BETA KAPPA

The Phi Beta Kappa Society, national honorary fraternity for the recognition and promotion of scholarship, was founded at the College of William and Mary in 1776. The Bowdoin Chapter (Alpha of Maine), the sixth in order of establishment, was founded in 1825.

Election is based primarily on scholarly achievement, and consideration is given to the student's entire college record. Students who have studied away are expected to have a total academic record, as well as a Bowdoin record, that meets the standards for election. Nominations are made three times a year—usually in September, February, and May. The total number of students selected in any year does not normally exceed ten per cent of the number graduating in May.

Students elected to Phi Beta Kappa are expected to be persons of integrity and good moral character. Candidates must have completed at least twenty-four semester courses of college work, including at least sixteen courses at Bowdoin.

JAMES BOWDOIN DAY

Named in honor of the earliest patron of the College, James Bowdoin Day was instituted in 1941 to accord recognition to those undergraduates who distinguish themselves in scholarship. Inaugurated by Stanley Perkins Chase '05, Henry Leland Chapman Professor of English Literature (1925-1951), the exercises consist of the announcement of awards, the presentation of books, a response by an undergraduate, and an address.

The James Bowdoin Scholarships, carrying no stipend, are awarded to undergraduates who have completed a minimum of two semesters' work. The scholarships are determined on the basis of a student's entire record at Bowdoin. To be named a James Bowdoin Scholar a student must obtain three-quarters honor grades, including one-quarter high honor grades. A student must obtain two additional high honor grades to balance each grade of pass, in addition to the three-quarter honor grades.

A book, bearing a replica of the early college bookplate serving to distinguish the James Bowdoin Collection in the library, is presented to every undergraduate who has carried a full course program and has received a grade of high honors in each of his courses during the last academic year.

THE APPLIED ENVIRONMENTAL SCIENCE FUND

This fund was established in 1981 by gifts from Robert C. Porter of the Class of 1934, the Ivy Fund, Suburban Propane Gas Corporation, March & McLennan Companies, Inc., and Eberstadt Asset Management, Inc. It is to be used to support the research and instructional program of the Marine Research Laboratory and the Hydrocarbon Research Center.

FACULTY DEVELOPMENT FUND

This fund was established by Charles Austin Carey, LL.D., of the Class of 1910. The income from the fund is expended each year "for such purpose or purposes, to be recommended by the President and approved by the Governing Boards, as shall be deemed to be most effective in maintaining the caliber of the Faculty." These purposes may include, but not be limited to, support of individual research grants, productive use of sabbatical leaves, added compensation for individual merit or distinguished accomplishment, other incentives to encourage individual development of teaching capacity, and improvement of faculty salaries.

FACULTY RESEARCH FUND

This fund, founded by the Class of 1928 on the occasion of its twenty-fifth anniversary, is open to additions from other classes and individuals. The

interest from the fund is used to help finance research projects carried on by members of the faculty.

UNDERGRADUATE RESEARCH ASSISTANCE

Surdna Foundation Undergraduate Research Fellowship Program

An undergraduate research fellowship program established in 1959 was renamed in 1968 the Surdna Foundation Undergraduate Research Fellowship program in recognition of two gifts of the Surdna Foundation. The income from a fund, which these gifts established, underwrites the program's costs. Fellowships may be awarded annually to highly qualified seniors. Each Surdna Fellow participates under the direction of a faculty member in a research project in which the faculty member is independently interested.

The purpose is to engage the student directly in a serious attempt to extend man's knowledge. Each project to which a Surdna Fellow is assigned must therefore justify itself independently of the program, and the fellow is expected to be a participant in the research, not a mere observer or helper. The nature of the project differs from discipline to discipline, but all should give the fellow firsthand acquaintance with productive scholarly work. Should the results of the research be published, the faculty member in charge of the project is expected to acknowledge the contribution of the Surdna Fellow and of the program.

Surdna Fellows are chosen each spring for the following academic year. Awards are made on the basis of the candidate's academic record and departmental recommendation, his or her particular interests and competence, and the availability at the College of a research project commensurate with his talents and training. Acceptance of a Surdna Fellowship does not preclude working for honors, and the financial need of a candidate does not enter into the awarding of fellowships. Surdna Fellows are, however, obligated to refrain from employment during the academic year. The stipend is \$1,600 for part-time research during the academic year or full-time research in eight weeks of the summer. There are eight awards annually.

Alfred O. Gross Fund

This fund, established by Alfred Otto Gross, Ph.D., Sc.D., Josiah Little Professor of Natural Science, and members of his family, is designed to assist worthy students in doing special work in biology, preferably ornithology. Income from the fund may be used for such projects as research on Kent Island, travel to a given region or library for particular work, purchase of special apparatus, attendance at an ornithological congress or other scholarly

gatherings, and publication of the results of research. Although the fund is administered by Bowdoin College, assistance from the fund is not limited to Bowdoin students.

Fritz C. A. Koelln Research Fund

This fund was established in 1972 by John A. Gibbons, Jr., of the Class of 1964, to honor Fritz C. A. Koelln, professor of German and George Taylor Files Professor of Modern Languages Emeritus, who was an active member of the Bowdoin faculty from 1929 until 1971. The income from the fund may be awarded annually to a faculty-student research team to support exploration of a topic which surmounts traditional disciplinary boundaries. The purpose of the fund is to encourage broad, essentially humanistic inquiry, and should be awarded with preference given to worthy projects founded at least in part in the humanities.

Edward E. Langbein, Sr. Summer Research Grant

An annual gift of the Bowdoin Parents' Fund is awarded under the direction of the president of the College to undergraduates or graduates to enable the recipients to participate in summer research or advanced study directed towards their major field or life work. Formerly the Bowdoin Fathers Association Fund, the grant was renamed in 1970 in memory of a former president and secretary of the association.

Research, Educational, and Conference Facilities

BETHEL POINT MARINE RESEARCH STATION

THE COLLEGE's marine research facility is located approximately ten miles from the campus on a seventeen-acre parcel of land with considerable shore frontage. Two laboratories are situated on the land. All major coastal environments of Maine are represented in microcosm, offering a unique opportunity for study. In conjunction with the hydrocarbon research performed by Bowdoin's Department of Chemistry, the staff of the Bethel Point facility studies the chemical and biological consequences of oil spills on marine environments. While much of this study has been performed at the station and other points on the Maine coast, Bowdoin research teams have investigated spills in France, Puerto Rico, and various locations along the eastern seaboard of the United States.

Directed by Dr. Edward S. Gilfillan, the Bethel Point Marine Research Station provides opportunities for independent study during the academic year and some summer research positions for Bowdoin students.

BOWDOIN SCIENTIFIC STATION

The College maintains a field station at Kent Island, off Grand Manan, in the Bay of Fundy, New Brunswick, Canada, where qualified students can conduct field work on biological problems. Kent Island, containing about 200 acres and several buildings, was presented to the College in 1935 by John Sterling Rockefeller.

Kent Island is a major seabird breeding ground and the home of various land birds. Its location makes it a concentration point for migrating birds in spring and fall. The famous Fundy tides create excellent opportunities for the study of marine biology. The terrestrial habitats are surprisingly varied for an island of this size.

No formal courses are offered at the station, but students from Bowdoin and other institutions are encouraged to select problems for investigation at Kent Island during the summer and to conduct field work on their own initiative with the advice and assistance of the Department of Biology. Approved work at the station is acceptable for credit as independent study. Field trips of short duration to Kent Island are a feature of Bowdoin's courses in ecology and ornithology.

Faculty members and graduate students from numerous universities and colleges conduct research in biology at the Bowdoin Scientific Station. They

help the undergraduate members of the station through informal instruction and as examples of experienced investigators at work.

Financial assistance for students conducting research at Kent Island is available from the Alfred O. Gross Fund (see pages 290-291). Other funds which support the Bowdoin Scientific Station are the Kent Island Fund, the Heizaburo Saito Fund, the Minot Fund, and the Roy Spear Memorial Fund.

BRECKINRIDGE PUBLIC AFFAIRS CENTER

The Breckinridge Public Affairs Center is a 23-acre estate on the tidal York River in southern Maine. The center includes a 25-room main house, formal gardens, a gymnasium, a clay tennis court, and a 110-foot circular, saltwater swimming pool. Owned and operated by Bowdoin College, the center is used for classes, seminars, and meetings of educational, cultural, and civic groups. Business and professional organizations also use the facility for planning sessions and staff development activities. River House, which accommodates nineteen overnight guests, was designed by Guy Lowell in 1905 and is on the National Register of Historic Places. The estate was given to Bowdoin in 1974 by Marvin Breckinridge Patterson, whose husband was the Honorable Jefferson Patterson of St. Leonard, Maryland. Named in honor of Mrs. Patterson's family, who built the house, the estate is available for use April 1 through July 25 and September 17 through Thanksgiving each year.

COLEMAN FARM BANDING STATION

During the course of the academic year, students conduct field study in ornithology at a site three miles south of the campus, using a tract of college-owned land which extends to the sea. Numerous habitats of resident birds are found on the property, and it is a stopover point for many migratory species. Organized by students in 1975, the Coleman Farm Banding Station is equipped by the College and a generous neighbor, E. Christopher Livesay, and operates under the direction of the Department of Biology.

WCBB-TV

WCBB-TV is a public television station formed by Bates, Bowdoin, and Colby colleges in 1961. It is licensed to Colby-Bates-Bowdoin Educational Telecasting Corporation and serves approximately 750,000 people in southern Maine and eastern New Hampshire. At the time of its founding, it was the first noncommercial television station in Maine, the third in New England, and one of the earliest in the nation. It is supported primarily by contributions from viewers, an annual auction, and grants from business, industry, and foundations.

WCBB-TV broadcasts a wide variety of programs, including programs for use in the schools and for a general home audience. In addition to local programs produced by members of the staff, WCBB-TV broadcasts programs provided by the Public Broadcasting System and the Eastern Educational Telecasting Network.

Degrees Conferred in May 1988

BACHELOR OF ARTS

Heather Eileen Adams	Virginia O'Neal Blossom
Maria Christina Afentakis	Lori Marie Bodwell
Steven David Albert	Anne Alexandra Boettcher
Thomas William Aldrich	Laura Diane Bongiorno
Christopher Wayne Allen	Christopher Robert Boone
James Robert Anderson	Ruth Borgeson
Susan Maria Langdon Anderson	Michael Paul Botelho
Pietro Giovanni Andres	Lisa Mariette Bourassa
Kyle Mead Appell	Julia Beth Brabson
Jonathan Daniel Applefield	Dawn Nichole Bradford
Joseph Edward Arleo, Jr.	Jane Elizabeth Branson
Andrew David Auerbach	Lucinda Barbara Breland
Lisa Wescott Aufranc	Lisa Joy Brenner
Audrey Norden Augustin	Peter William Bridgford
Peter James Augustoni '87	Scott Richard Britton
Joseph Tebben Bagnoli	Deerin Shepardson Brott
William May Baker	Scott Eric Brown
Deborah Faith Balcom	Tyrone Emmanuel Brown
Karen Doris Barbetta	Alvin Edward Gordon Buffonge
Prosper Charlotte Barter	Sarah Allen Bullock
James Arthur Barton	Susan Loretta Burgess '87
Jeffrey Lee Battiston	Timothy Brydon Burnell
David Earl Beard	David Newell Burnham
Elise Paulette Becker	Cory Alan Burns
Aditya Behl	Gayle Sue Burns
Shawn Kenneth Bell	Tonya Francesca Bynoe
David Poth Belmont	Francis Lloyd Byrne
Larissa Belsky	Glenn William Caan, Jr. '87
Andrew Bernstein	Elizabeth Marshall Calciano
Alice T. Biddle	Madeline Joan Camarda '87
Geoffrey Whitson Bilder '87	Heidi Ann Cameron
Morgan Locher Binswanger	Stuart Adams Campbell
Lucas August Birmelin	Andrew Reynolds Carlin '87
Gregory Anthony Bittar '87	Beth Ann Cerce
Kevin Michael Blanchard	Amy Heather Chavinson
Linda Anne Blanchard	Andrew Edward Christie
Beate Blennemann	Mary Karol Cline
Donald W. Blodgett '54	Alexandra Louise Coffey '87

Benjamin M. Cohan	Scott Allen Farrell
John F. Cole	Barry Patrick Faulkner
Peter Forsythe Collier	Todd Adam Feinsmith
Phebe Pendleton Conrey	Scott Crandall Feldman
Jack Peter Cooley	Joseph Lawrence Ferlazzo
Heather Ann Corey	Brian James Ferriso
Marcia Jane Cornell	Robert Randolph Finn
Dave J. Crawford	Christopher Charles Fitz
Scott Wilson Crocker	Susan Elizabeth Flood
Stephen James Curley	Robert John Follett
Ralph Benedict D'Agostino, Jr.	Jonathan Jensen Fouts
Elizabeth Anne Danaher	Lisa Ann Fraleigh
Hugh Davis Davies '87	Caroline Louise Freund
Charles Folsom Davis, Jr.	Allen Wesley Frost
Francis Michael Days	Peter James Gallagher
Francis Paul Dean	William Maskey Galloway
Andrew John Deane	Erik Anthony Gans
Nicolette de Bruyn	Darin Stephen Garner
Robert John DeFreitas	Kristen Lynn Gaysunas
Nancy Rita Delaney	Jennifer Ann Gervais '87
Catherine Wheeler Dempsey	Stephen Howard Gevedon
Richard Lawrence Derderian	John Anthony Gibbons
Timothy J. Devaney	Andrew Havemeyer Godfrey
Joanna Marie DeWolfe	Roger Michael Gold
Brendan Gilmore Diffley	Jennifer Rae Goldman '87
Peter William Dillon	Marilyn Sterling Gondek
James Benjamin Dilsheimer	Shawn Christine Goodwin
David Joseph Dobrowski	Stephen Paul Gordon '72
Tara J. Dooley	Barbara A. Granville
Thinley Tobgay Dorji	Steven Mark Greenberg
F. Blinn Dorsey	Kimberlee Joan Grillo
John David Doughty	Nicholas Munroe Grumbach
Stephen Michael Drigotas	Eric Alfred Grunbaum
Laurie Masha Duchovny	Laura Haddad
Louise Jameson Dwight '87	Catherine Howland Hamilton
Elizabeth Ridley Eggleston '89	Christopher Haydock Hampson
Melisa Thayer Erder	Kevin Douglas Hancock
Scott David Erlenborn	Henry Harrison Hand
William Todd Espey	Angela Jane Hansen
Susan Marie Evans '87	Michael Joseph Hartnett, Jr.
William T. Evans III '87	Mark Carter Harvey
James Robert Everett	Gordon Calvin Hastings
Laura Jean Farnsworth	Margaret Crago Hausman

Kevin Benedict Hawkins
Heidi Jean Heal
Cynthia Richards Heller
Lawrence David Heller
Anita M. Heriot
Kate Amelia Herz
Christopher Lawrence Hill
George Shelton Hillhouse
Michael F. Hinerman '87
Peter John Hodum
Edythe Page Hoffman
Jennifer Marie Holland
Sarah Miles Holloway
Michael Toby Howe '87
Amy Wheeler Hudson
Neal Huff
Alice Anderson Hufstader
Timothy James Hughes
John Martin Hurley
Fredrick Wickett Huszagh II
Steven Ilkos
Peter Frederick Imhoff
John Peter Ivers '87
Alan Jeffrey Iverson
Lisa Ann Jacobs
Julianne Jeremiah
Martin Paul Jessiman
Heather Andrea Johnson
Melanie S. Johnson
Pandora Lucinda Love
Johnson '87
Charles Quarles Kamps, Jr. '87
Anja Joan Kannengieser
Daniel Robert Kany
Jessica Saron Kaplan
Lisa Ange Kelley
James Cornelius Kelly '87
John Aaron Kidd
Melissa S. Kieley
Joseph Heye Killoran
Edward Y. Kim
Jeremy Weaver Kimball
Elizabeth Ann King

Michael Wholley King
Douglas Franklin Kirshen
Rebecca Kearney Knapp
Samuel J. Koh
Paul Bennett Korngiebel
Jeffrey Michael Kralik
Kathleen Elizabeth Kramer
Seth Martin Kursman
Marya Parmele Labarthe
Christopher Jay Lacke
Roger Weir Ladda
Deborah Suzanne LaFond
Laura Ann Lambert
Peter Bruce LaMontagne
Amy Bradford Landau
Jeffrey Anthony LaPlante
Karen Jeannette Lappas
Paul Matthew LaPunzina
Jennifer Ann Larson
Joan Margaret Lawlor
Joanna E. Leary
August Budirahmat Lembong
Emily Buckner Lessen
Elizabeth A. Leonard
Maureen Barbara Letson
Lynn Lena Levasseur
Peter Keynes Levitt
Phillip Scott Libby
Frederick Lewis Lipp
William McKee Littell
Kimberly Page Little
Dana Adele Lombardi
Eric J. Lunger
David Mitchell Lyman
Dorothy Marie MacGillivray
Bruce Eugene Mann, Jr. '87
Stathis Stavros Manousos
Stefan Charles Marelid
Patricia Carolina Marquez
Jay Raymond Martin
Lawrence Hedrick Martin
Michael Montgomery May
David Gerard Mazzella III

Robert Lyons McCabe, Jr.	Jane Leslie Phillips
Edward F. McDonnell	Christopher Bradford Pike
Julie Ann McGirl	Josh N. Plant
Christopher Martin McGlincey	Liza Hope Polakov '85
Daniel Patrick McGovern	Benet Steven Polikoff
Edwin Miller McGowan	Edward Byron Pond
Ryan Patrick McGuire	Tiffany Anne Poor
James Woods McLane, Jr.	Paige Meyer Potter
Karen Elena McSweeney '87	Leslie Trude Preston
Jane Brewster Merritt	John Joseph Rabasco
James Andrew Mickiewicz	Brad Thomas Rabor
Bradley Philip Miller	Jacob A. Rahiman
Robert Daniel Millis	Dari Tuck Ramler
Scott Vincent Milo	Hilary Ann Rapkin
Townsend Reed Morey III '86	Ian Christopher Ridlon
Anna Mitra Morgan	Joanna Irene Rizoulis
Evan Wadsworth Morris III '87	Jill Anne Roberts
Michelle Marie Morrow	Juliana Veeder Robertson '87
Elizabeth America Ann Mullen	Mark Eliot Rodgers
Andrew Seward Murray	Daniel Rosner '87
Phillip James Napolitano	Beth Rotner
Mary Susan Needham	Charles William Rupinski
Theresa Ann Nester	Keith Edmund Russell
David Greene Nicholls	Stephen Burke Ryan
Jennifer Carolyn Noering	Yana Elena Salomon
Piet Hana Ogata	Sarah Walrath Sanborn
Susan Margaret O'Hara	Amy Carlisle Sanderson
Theresa Anne O'Hearn	Michael Stephen Saulter
John F. Ollis, Jr.	James Joseph Savage
Penny Lynn Palevsky	Marshall Edward Saxe
Andrew Hunt Palmer	Nina Anne Schwartz
Suzanne Mary Palmer	Walter John Scott III
Eric Lee Palmquist	Devika Rani Seth
Chrys Pappas	Lisa Marie Sevigny
Peter Philip Paradis	Christopher Johann Sewall
Margaret Carol Patrick	Samuel Brooks Shepherd
Nicholas Peay III	Carey Elizabeth Smith
Dawn Derrie Pelton	Christopher McLane Smith '87
Warren Mark Peluso	Sarah DeForest Smith
Christopher Locke Pennington	Mark Thomas Smyth
Thomas Quincy Peters	Elizabeth King Snodgrass
Kristen Louise Peterson '87	Heidi Linette Snyder
Will Peter Pettinger	William Cordes Snyder

Daniel Robert Sogg '87	Scott Bradley Twitchell
Barry Wayne Spear	Joseph Vaccaro
Cynthia Lynne Sperry	Maria Ann Vandin
Ruby Spicer	Elizabeth Greever Van Tuy
Mark Willard Stanley	Sidney Anne Varian
Denielle Dee Stasa	Joseph Norman Veilleux
Sarah Kathleen Staveley-	David A. Ventimiglia '87
O'Carroll	Lynn Beatrice Vogelstein
Alexandra Christine Steiner	Sharon Michele Walker
Jennifer Salten Stern	Angus Alexander Wall
Alison Graham Stoddart	Jamie Ann Wallace
Leslie Burnam Stone	Piper Elizabeth Ward
John Paul Stonestreet	Christopher Watson
Colles Coe Stowell, Jr.	Warren Stuart Weiner
Sarah Marshall Stoycos	Paul Edmund Whalon
Stuart Beall Strong, Jr.	Katharine Lyon Whitman
Joy Ellen Stuart	Matthew Scott Wilcox
Jeffrey Marquis Sullivan '86	Vicky L. Willey
Colm Sweeney	Joseph Pirie Williams
Michael Christopher Sz wajkowski	Julianne Williams
Mark Samuel Tannenbaum	Lori Ann Willinghurst
Susan Elizabeth Tegtmeier	Deborah B. Brush Wilson
Carmen Isabelle Thomas	Linda Barton Woodhull
Joanne Elizabeth Thompson	Robert Howard Wuillamey
Steven Wilcox Thornton	Sharon Elizabeth Yandian
Joan Ames Tickner	Karin Beatrice Yeatts
Thomas Allen Trafton, Jr. '87	Susan Louise Young '89
Andrea Tsacoyeanes	George Hiner Zinn III '87
Cyril Iselin Tuohy	David Alexander Zonana

RECIPIENTS OF HONORARY DEGREES

Tina Howe
Doctor of Letters

Bernard Lown
Doctor of Science

Kurt Stephen Ollmann '77
Doctor of Music

James Russell Wiggins
Doctor of Letters

Robert L. Woodbury
Doctor of Humane Letters

Appointments, Prizes, and Awards

PHI BETA KAPPA

Susan Maria Langdon Anderson	Melissa S. Kielty
Pietro Giovanni Andres	Douglas Franklin Kirshen
Kyle Mead Appell	Paul Bennett Korngiebel
Aditya Behl	William McKee Littell
Shawn Kenneth Bell	Stefan Charles Marelid
Lori Marie Bodwell	Lawrence Hedrick Martin
Deerin Shepardson Brott	Theresa Ann Nester
Gayle Sue Burns	Theresa Anne O'Hearn
Joanna Marie DeWolfe	Sarah Walrath Sanborn
Peter James Gallagher	Devika Rani Seth
Jennifer Ann Gervais '87	Samuel Brooks Shepherd
Roger Michael Gold	Jennifer Salten Stern
Marilyn Sterling Gondek	Joy Ellen Stuart
Kimberlee Joan Grillo	Jeffrey Marquis Sullivan '86
Heidi Jean Heal	Susan Elizabeth Tegtmeyer
Peter John Hodum	Joanne Elizabeth Thompson
Melanie S. Johnson	Katharine Lyon Whitman
James Cornelius Kelly '87	

HONORARY APPOINTMENTS

Summa Cum Laude

Susan Maria Langdon Anderson	Lawrence Hedrick Martin
Pietro Giovanni Andres	Theresa Ann Nester
Kyle Mead Appell	Theresa Anne O'Hearn
Aditya Behl	Sarah Walrath Sanborn
Shawn Kenneth Bell	Devika Rani Seth
Joanna Marie DeWolfe	Samuel Brooks Shepherd
Roger Michael Gold	Daniel Robert Sogg '87
Marilyn Sterling Gondek	Jennifer Salten Stern
Kimberlee Joan Grillo	Joy Ellen Stuart
Melissa S. Kielty	Susan Elizabeth Tegtmeyer
Douglas Franklin Kirshen	Joanne Elizabeth Thompson
Paul Bennett Korngiebel	Katharine Lyon Whitman

Magna Cum Laude

Jonathan Daniel Applefield	Karen Doris Barbetta
William May Baker	Kevin Michael Blanchard

Linda Anne Blanchard
Beate Blennemann
Lori Marie Bodwell
Michael Paul Botelho
Lisa Mariette Bourassa
Gayle Sue Burns
Amy Heather Chavinson
Scott Wilson Crocker
Francis Paul Dean
Andrew John Deane
Nancy Rita Delaney
Richard Lawrence Derderian
James Benjamin Dilsheimer
Tara J. Dooley
F. Blinn Dorsey
Stephen Michael Drigotas
Elizabeth Ridley Eggleston '89
James Robert Everett
Barry Patrick Faulkner
Todd Adam Feinsmith
Robert John Follett
Jonathan Jensen Fouts
Peter James Gallagher
Jennifer Ann Gervais '87
Steven Mark Greenberg
Eric Alfred Grunbaum
Mark Carter Harvey
Peter John Hodum
Amy Wheeler Hudson
Lisa Ann Jacobs
Julianne Jeremiah
Melanie S. Johnson
Charles Quarles Kamps, Jr. '87
Daniel Robert Kany
James Cornelius Kelly '87
Edward Y. Kim

Kathleen Elizabeth Kramer
Seth Martin Kursman
Marya Parmele Labarthe
Laura Ann Lambert
Peter Bruce LaMontagne
Amy Bradford Landau
Karen Jeannette Lappas
Joanna E. Leary
Lynn Lena Levasseur
Frederick Lewis Lipp
William McKee Littell
Kimberly Page Little
Eric J. Lunger
Stefan Charles Marelid
Patricia Carolina Marquez
Jane Brewster Merritt
Phillip James Napolitano
David Greene Nicholls
Jane Leslie Phillips
Edward Byron Pond
Leslie Trude Preston
Hilary Ann Rapkin
Jill Anne Roberts
Beth Rotner
Lisa Marie Seigny
Elizabeth King Snodgrass
Ruby Spicer
Denielle Dee Stasa
Alison Graham Stoddart
Sarah Marshall Stoycos
Jeffrey Marquis Sullivan '86
Michael Christopher Szwajkowski
Lynn Beatrice Vogelstein
Paul Edmund Whalon
Karin Beatrice Yeatts

Cum Laude

Andrew David Auerbach
Audrey Norden Augustin
Prosper Charlotte Barter
David Earl Beard
David Poth Belmont

Anne Alexandra Boettcher
Sarah Allen Bullock
Timothy Brydon Burnell
David Newell Burnham
Elizabeth Marshall Calciano

Andrew Edward Christie
 Mary Karol Cline
 Marcia Jane Cornell
 Dave J. Crawford
 Ralph Benedict D'Agostino, Jr.
 Elizabeth Anne Danaher
 Francis Michael Days
 Nicolette de Bruyn
 John David Doughty
 Melisa Thayer Erder
 Scott David Erlenborn
 William Todd Espey
 Laura Jean Farnsworth
 Susan Elizabeth Flood
 Lisa Ann Fraleigh
 Nicholas Munroe Grumbach
 Kevin Douglas Hancock
 Angela Jane Hansen
 Cynthia Richards Heller
 Anita M. Heriot
 Alice Anderson Hufstader
 Alan Jeffrey Iverson
 Lisa Ange Kelley
 John Aaron Kidd
 Joseph Heye Killoran
 Elizabeth Ann King
 Deborah Suzanne LaFond
 Paul Matthew LaPunzina
 August Budirahmat Lembong

Maureen Barbara Letson
 David Gerard Mazzella III
 Robert Lyons McCabe, Jr.
 Karen Elena McSweeney '87
 James Andrew Mickiewicz
 Robert Daniel Millis
 Townsend Reed Morey III '86
 Michelle Marie Morrow
 Elizabeth America Ann Mullen
 Andrew Seward Murray
 Eric Lee Palmquist
 Peter Philip Paradis
 John Joseph Rabasco
 Mark Eliot Rodgers
 Charles William Rupinski
 Yana Elena Salomon
 Marshall Edward Saxe
 Nina Anne Schwartz
 Carey Elizabeth Smith
 Cynthia Lynne Sperry
 Leslie Burnam Stone
 Carmen Isabelle Thomas
 Andrea Tsacoyeanes
 Elizabeth Greever Van Tuyl
 Sidney Anne Varian
 Matthew Scott Wilcox
 Lori Ann Willingham
 Robert Howard Wuillamey
 David Alexander Zonana

HONORS IN MAJOR SUBJECTS

Anthropology: *High Honors*, Katharine Lyon Whitman, Deborah B. Brush Wilson.

Art History: *High Honors*, Jennifer Salten Stern.

Art History and Religion: *High Honors*, Daniel Robert Sogg '87.

Asian Studies: *Honors*, Peter Forsythe Collier, Marcia Jane Cornell, Leslie Burnam Stone.

Biochemistry: *Highest Honors*, Amy Heather Chavinson.

High Honors, Lisa Marie Sevigny.

Honors, Amy Wheeler Hudson, Melissa S. Kietly.

Biology: *Highest Honors*, Andrew Edward Christie, Peter John Hodum.

High Honors, Scott Allen Farrell, Jennifer Ann Gervais '87.

Honors, Pietro Giovanni Andres, Beate Blennemann, Nicholas Munroe Grumbach.

Chemical Physics: *Honors*, Townsend Reed Morey III '86.

Chemistry: *High Honors*, Timothy Brydon Burnell.

Honors, Robert John Follett, Theresa Ann Nester, John Joseph Rabasco,

Christopher Johann Sewall, Lori Ann Willinghurst, Karin Beatrice Yeatts.

Classics: *Highest Honors*, Aditya Behl.

Economics: *Highest Honors*, Sarah Walrath Sanborn.

Honors, David Earl Beard, Jonathan Jensen Fouts, Caroline Louise Freund.

English: *High Honors*, Paul Bennett Korngiebel, David Greene Nicholls, Jill

Anne Roberts, Samuel Brooks Shepherd, Daniel Robert Sogg '87.

Honors, Kevin Michael Blanchard, James Benjamin Dilsheimer, Melissa S. Kielty, Michael Christopher Szwajkowski.

German: *Highest Honors*, Eric Alfred Grunbaum, August Budirahmat Lembong.

High Honors, Charles Quarles Kamps, Jr. '87, Kathleen Elizabeth Kramer, Cynthia Lynne Sperry.

Government: *High Honors*, Shawn Kenneth Bell, Peter Bruce LaMontagne.

Honors, Elizabeth Marshall Calciano, Mary Karol Cline, Stephen James Curley, Tara J. Dooley, Cynthia Richards Heller, Frederick Lewis Lipp, Andrea Tsacoyeanes.

History: *High Honors*, Michael Paul Botelho, Francis Paul Dean, Richard

Lawrence Derderian, Elizabeth Ridley Eggleston '89, Robert John Follett, Roger Michael Gold, Kimberlee Joan Grillo, Lisa Ann Jacobs.

Honors, Geoffrey Whitson Bilder '87, William Maskey Galloway, Jane Brewster Merritt, Charles William Rupinski.

Mathematics: *High Honors*, Susan Maria Langdon Anderson.

Music: *Highest Honors*, Sarah Marshall Stoycos.

Philosophy: *Honors*, Todd Adam Feinsmith.

Physics: *High Honors*, James Robert Everett.

Honors, Joseph Hey Killoran.

Psychobiology: *High Honors*, Anne Alexandra Boettcher.

Psychology: *Highest Honors*, Joanna Marie DeWolfe.

High Honors, Stephen Michael Drigotas, Daniel Robert Kany.

Religion: *Highest Honors*, Marilyn Sterling Gondek.

Romance Languages: *Highest Honors*, Karen Jeannette Lappas.

High Honors, Jennifer Marie Holland, Joanna Irene Rizoulis.

Honors, Elizabeth America Ann Mullen.

Russian: *Highest Honors*, Larissa Belsky.

High Honors, Marya Parmele Labarthe.

Studio Art: *High Honors*, Steven David Albert, Melisa Thayer Erder, Joseph Lawrence Ferlazzo, Piet Hana Ogata.

Honors, Angus Alexander Wall.

APPOINTMENTS, PRIZES, AND AWARDS

Undergraduate Awards

Commencement Awards

DeAlva Stanwood Alexander Prize: 1st: Laurie Masha Duchovny; 2nd: Lisa Mariette Bourassa.

Class of 1868 Prize: Samuel Brooks Shepherd

Goodwin Commencement Prize: Susan Maria Langdon Anderson.

Class Marshal: Alvin Edward Gordon Buffonge.

Departmental Prizes

Art

Art History Junior-Year Prize: Barie-Lynne Dolby '89, Katharine Sibley Erda '89.

Art History Senior-Year Prize: Douglas Franklin Kirshen, Susan Elizabeth Tegtmeyer, Joanne Elizabeth Thompson.

Anne Bartlett Lewis Memorial Prize: Steven David Albert, Jennifer Salten Stern.

Biology

Copeland-Gross Biology Prize: Melissa S. KIELTY.

Donald and Harriet S. Macomber Prize: Pietro Giovanni Andres, Peter John Hodum.

James Malcolm Moulton Prize: Thomas Jeffrey Carmichael '89.

Chemistry

ACS Award in Analytical Chemistry: Sharon Elizabeth Anthony '89

American Institute of Chemists Award: Christopher Johann Sewall.

Kamerling Laboratory Award: Bradford Hammond Hirth '90, Timothy Albert Jackson '90.

Merck Index Award: Theresa Ann Nester.

Philip W. Meserve Prize in Chemistry: Damon Geoffrey Guterman '89

William Campbell Root Award: Timothy Brydon Burnell.

U.S. Chemical Rubber Company Freshman Award: Corey Remsen Freeman '91

U.S. Chemical Rubber Company Laboratory Award: Michael Edward Matos '91

Classics

Hannibal Hamlin Emery Latin Prize: Heidi Jean Heal.

Nathan Gould Prize: Aditya Behl.

J. B. Sewall Latin Prize: Susan Clark Moore '90.

Economics

Noyes Political Economy Prize: Sarah Walrath Sanborn.

English

Academy of American Poets Prize: Alvin Edward Gordon Buffonge.

Philip Henry Brown Prizes: 1st: Daniel Robert Sogg '87; 2nd: Laurie Masha Duchovny, David Greene Nicholls.

Hiland Lockwood Fairbanks Prizes: 1st: Robert John DeFreitas; 2nd: Jeffrey Holland Patterson '90.

Poetry Prize: David James Callan '91.

Pray English Prize: Paul Bennett Korngiebel, Samuel Brooks Shepherd.

Forbes Rickard, Jr., Memorial Prize: Aditya Behl.

David Sewall Premium: Adam Judd Kleinman '91.

Bertram Louis Smith, Jr., Prize: Daniel Stephen Malachuk '89, William Stevenson McConnell '89.

German

German Consular Certificate: Elizabeth King Snodgrass.

Old Broad Bay Prizes in German: Peter Timothy Chipman '91, Renate Luise Scholz '90, Elizabeth King Snodgrass.

Government and Legal Studies

Philo Sherman Bennett Prize: Shawn Kenneth Bell, Peter Bruce LaMontagne.

Jefferson Davis Award: Michael Christopher Szwajkowski.

Fessenden Prize in Government: Cynthia Richards Heller.

History

James E. Bland History Prize: Richard Lawrence Derderian, Robert John Follett.

Class of 1875 Prize: Michael Paul Botelho, Francis Paul Dean.

Mathematics

Edward Sanford Hammond Mathematics Prize: Susan Maria Langdon Anderson.

Smyth Mathematical Prize Fund: Michael Hillard Frantz '90.

Music

Sue Winchell Burnett Music Prize: Linda Anne Blanchard.

Philosophy

Philip W. Cummings Philosophy Prize: Cynthia Lynne Sperry.

Physics

Edwin Herbert Hall Physics Prize: Peter Edward Nugent, Jr. '90, Kenneth John Woods '90.

Noel C. Little Prize: James Robert Everett.

Psychology

Frederic Peter Amstutz Memorial Prize: Joanna Marie DeWolfe.

Religion

Edgar O. Achorn Prize: Julie Emily Felner '91, Tanya Mieszkowski '90, Cecilia Hirsch '90.

Lea Ruth Thumim Biblical Prize: Paul Bennett Korngiebel.

Romance Languages

Philip C. Bradley Prize: Frederick Lewis Lipp, Katharine Lyon Whitman.

Goodwin French Prize: Lisa Mariette Bourassa.

Eaton Leith French Prize: Kathryn Marianna Nanovic '90.

Charles H. Livingston Honors Prize: Karen Jeannette Lappas, Joanna Irene Rizoulis.

Sociology and Anthropology

Matilda White Riley Prize: Deborah B. Brush Wilson.

Theater Arts

Director of Theater Special Award: William May Baker, Alvin Edward Gordon Buffonge.

Abraham Goldberg Prize: Linda Anne Blanchard, Denielle Dee Stasa.

Masque and Gown Figurine: Michael Ernest Libonati '91, David William Spohr '91.

Masque and Gown One-Act Play Prizes: *actor:* Louis John Frederick '90; *director:* David Jeffrey Mittel '89.

Alice Merrill Mitchell Prize: Cory Alan Burns, Elizabeth Ridley Eggleston '89, Laura Jean Farnsworth.

William H. Moody '56 Prize: Anne Alexandra Boettcher, Emily Buckner Lenssen, James Woods McLane, Jr.

George H. Quinby Award: Anne Sabine Beseler '91, David James Callan '91, Charles Lindsay Gibbs II '91, Meredith Leigh Sumner '91.

Bowdoin Dance Group Award: Catherine Howland Hamilton.

Scholarship Award for Summer Study in Dance: Juliet Nixon Boyd '91.

General Scholarship

Brooks-Nixon Prize: Daniel Robert Sogg '87.

Dorothy Haythorn Collins Award: Michael Angus Badger '89.

Almon Goodwin Phi Beta Kappa Prize: Joy Ellen Stuart.

Earle S. Thompson Student Fund: Todd Michael Greene '89, Ann Marie St. Peter '89.

Research Awards

Fritz C. A. Koelln Research Fund Award: Scott Richard Britton, Andrew John Deane, Kate Amelia Herz.

Edward E. Langbein, Sr., Summer Research Grant: Shawn Kenneth Bell, Melissa S. Kiely, Susan Elizabeth Tegtmeier, Matthew Scott Wilcox.

Summer Surdna Foundation Research Fellowships: Bethany Susan Jones '89, Daniel Joseph Rush '89, Diane Elizabeth Russell '89, Edmund Quincy Searles '89.

Surdna Foundation Undergraduate Fellowships: Sharon Elizabeth Anthony '89, Michael Angus Badger '89, Joshua Aaron Bloomstone '89, Damon Geoffrey Guterman '89, Timothy David Kupferschmid '89, Robert Todd Tisdale '89.

Undergraduate Instructional Fellowships: Susan Jeanne Lyons '89.

Extracurricular Activities

James Bowdoin Cup: Samuel Brooks Shepherd.

Bowdoin Orient Prize: Michael Paul Botelho, Tamara Manoji Dassanayake '90, Alan Paul Harris '89, Kathryn Marianna Nanovic '90, Justin Blaisdell Prisdorf '90, Dawn Aleece Vance '90.

Paul Andrew Walker Prize: Lori Marie Bodwell.

Andrew Allison Haldane Cup: Cynthia Richards Heller, Peter Bruce LaMontagne.

Orren Chalmer Hormell Cup: Mary Katherine Huggins '90.

Lucien Howe Prize: Laura Diane Bongiorno, Lisa Mariette Bourassa, Kevin Benedict Hawkins, Sharon Michele Walker.

Col. William Henry Owen Premium: Lynn Lena Levasseur.

Franklin Delano Roosevelt Cup: Ann Marie St. Peter '89.

Athletics

Leslie A. Claff Track Trophy: Benet Steven Polikoff.

Annie L. E. Dane Trophy: Catherine Wheeler Dempsey.

Francis S. Dane Baseball Trophy: Thomas William Aldrich.

William J. Fraser Basketball Trophy: Kevin Douglas Hancock.

Winslow R. Howland Football Trophy: Nelson Fry Lebo III '90, Timothy John Turner '90.

Elmer Longley Hutchinson Cup: Robert Lyons McCabe, Jr., Theresa Anne O'Hearn.

J. Scott Kelnberger Memorial Ski Trophy: Laura Haddad, William Cordes Snyder.

Samuel A. Ladd Tennis Trophy: Jack Peter Cooley.

George Levine Memorial Soccer Trophy: Stathis Stavros Manousos.

Robert B. Miller Trophy: Andrew David Auerbach, Edward Byron Pond.

Hugh Munro, Jr., Memorial Trophy: Stephen Ilkos.

Paul Nixon Basketball Trophy: Joseph Pirie Williams.

Wallace C. Philoon Trophy: John Paul Hartnett, Jr. '90.

William J. Reardon Memorial Football Trophy: B. Gregg Bohannon.

Reid Squash Trophy: Gary Robbins '90.

Harry G. Shulman Hockey Trophy: Mark Thomas Smyth.

Lucy L. Shulman Trophy: Audrey Norden Augustin, Nancy Rita Delaney.

Society of Bowdoin Women Athletic Award: Laura Diane Bongiorno, Leslie Trude Preston.

Paul Tiemer, Jr., Men's Lacrosse Trophy: Francis Lloyd Byrne.

David Berdan Wenigman Wrestling Trophy: Bruce Burgess Campbell '90.

Women's Basketball Alumnae Award: Kimberly Jeanne Lemieux '89.

Graduate Scholarships

Charles Carroll Everett Scholarship: Joanne Elizabeth Thompson.

Garcelon and Merritt Scholarships: Richard Pierson Beveridge '80, Anthony Blofson '79, Nathan Jon Blum '84, Douglas John Evans, '80, Peter Gordon Larcom '81, Thomas Michael Mitchell '80, Michael Richard Newton '85, Daniel Stephan Pratt '85, Dennis Charles Sgroi '83, Darwin Scott Smith '85, David Kenneth Spencer '80, Mark Douglas Totten '84, Eugene West '85, Richard Cedric Zellars '86.

Timothy and Linn Hayes Scholarships: Gary Herbert Dunham '82.

Guy Charles Howard Scholarship: Marilyn Sterling Gondek.

George and Mary Knox Scholarships: Andrea Margaret Fish '82, Susanne Folsom '86, David Charles Gvazdauskas '82, Maria Susana MacLean '84, Tamara Alexandra Nikuradse '84, Judith M. Peters '82, Lee Brett Silverman '86, William H. Songer '84, Nathan Paulin Zietlow '87.

Henry W. Longfellow Scholarship: Deborah Wilson Carpenter '83, Cheryl Ann Foster '83, Barbara Sawhill '81.

George W. McArthur Prize: Joanne Elizabeth Thompson.

Wilmot Brookings Mitchell Scholarship: Lauren Dana Chattman '85, John Owen Evelev '87, Paul Bennett Korngiebel, David Greene Nicholls, Gregory Bentley Stone '82.

Galen C. Moses Postgraduate Scholarship: Robert M. Savage '87.

O'Brien Graduate Scholarships: Geoffrey Whitson Bilder '87, Lisa Mariette Bourassa, Peter Tower Butterfield '86, Stephen James Curley, Seth Martin Kursman, Faith Alyson Perry '86, Christopher Johann Sewall, Paula Marie Tremblay '87, Sharon Michele Walker, Jeffrey Paul Winey '86.

Lee G. Paul Scholarship: Andrea Margaret Fish '82, Susanne Folsom '86, William H. Songer '83, Nathan Paulin Zietlow '87.

Peters Fund Scholarship: Scott Adelman '84, Gloria P. Bachelder '84, Margaret Ann Clavette '84, Scott Richard Lauzé '86, Mark David Poulin '83, Eric Tamerlane Shapiro '83, Carol-Ann P. Voisine '85.

Leonard A. Pierce Memorial Prize: Shawn Kenneth Bell.

Robinson-Davis Fund Scholarships: Kevin John Beal '86, Shawn Kenneth Bell, Lori Marie Bodwell, Peter Tower Butterfield '86, John Duddy Devine '86, Gretchen Lyons Jones '79, Moira Danielle Kelly '86, Frederick Lewis Lipp, Carol Ann MacLennan '78, Melinda J. Small '87, Mark Preston Snow '87.

VanSwearingen Fund: Judith Marie Austin '84, Michelle Louise Fromm '85, Holly Hamilton Goodale '82, Jill Elizabeth Barstow Heytens '85, Elizabeth Hartley Johnson '85, Cheryl Ann Menice '82.

Nathan Webb Research Scholarship in English: Lauren Dana Chattman '85, John Owen Evelev '87, Paul Bennett Korngiebel, David Greene Nicholls, Gregory Bentley Stone '82.

General Electric Research Fellowship: Melissa S. Kielty.

Alumni Organizations

ALUMNI ASSOCIATION

THE BOWDOIN COLLEGE ALUMNI ASSOCIATION has as its purpose "to further the well-being of the College and its alumni by stimulating the interest of its members in the College and in each other." Membership is open to former students who during a minimum of one semester's residence earned at least one academic credit toward a degree, to those holding Bowdoin degrees, and to anyone elected to membership by the Executive Committee of the Alumni Council.

The officers of the Alumni Council are ex officio the officers of the Alumni Association. The council members-at-large, the directors of the Alumni Fund, a faculty member, the treasurer, the director of Annual Giving, and the director of Alumni Relations serve as the Executive Committee of the council and the association.

ALUMNI COUNCIL

Officers: Michael S. Cary '71, president; William S. Faraci '69, vice president; Anne Wohltman Springer '81, secretary and treasurer.

Members-at-Large: *Terms expire in 1989:* Michael S. Cary '71, Theo A. de Winter '54, Edward M. Fuller II '60, Robert H. Millar '62. *Terms expire in 1990:* Anne R. Devine '81, William S. Faraci '69, Edward W. Rogers '51, Paula M. Wardynski '79. *Terms expire in 1991:* Anthony P. Belmont '60, Robert E. Ives '69, Edward E. Langbein, Jr. '57, D. Ellen Shuman '76. *Terms expire in 1992:* Helen E. Pelletier '81, Arthur L. Perry '57, Glenn K. Richards '60, George F. T. Yancey, Jr., '68.

Other members of the council are the editor of the *Bowdoin Magazine*, a representative of the faculty, the secretary of the College, the director of Annual Giving, the directors of the Alumni Fund, representatives of recognized alumni clubs, and three undergraduates.

ALUMNI COUNCIL AWARDS

Alumni Service Award: First established in 1932 as the Alumni Achievement Award and changed in name to the Alumni Service Award in 1953, this award is made annually to the person who, in the opinion of alumni, as expressed by the Alumni Council, best represents the alumnus or alumna whose services to Bowdoin most deserve recognition.

The recipient in 1988 was Geoffrey R. Stanwood '38.

Alumni Award for Faculty and Staff: Established by the Alumni Council in 1963, it is presented each year "for service and devotion to Bow-

doin, recognizing that the College in a larger sense includes both students and alumni." The award is made at the annual Homecoming Luncheon in the fall and consists of a Bowdoin clock and a framed citation.

The recipient in 1988 was Laurent C. Pinette.

Distinguished Bowdoin Educator Award: Established in 1964 to recognize outstanding achievement in education by a Bowdoin alumnus, except alumni who are members of the Bowdoin faculty and staff, the award consists of a framed citation and \$500. In 1985, the council voted to honor achievement both at the college/university level and the primary/secondary level.

The recipients in 1988 were William F. Wyatt, Jr. '53 at the college/university level and, at the primary/secondary level, W. John Friedlander '54.

BOWDOIN MAGAZINE

Established in 1927, the quarterly *Bowdoin Magazine* publishes articles of general interest about the College and its alumni. It is sent without charge to all alumni, seniors, parents of current students, faculty and staff members, and various friends of the College. Other alumni publications include *The Whispering Pines* and various newsletters. The magazine is edited by Charles C. Calhoun.

BOWDOIN ALUMNI SCHOOLS AND INTERVIEWING COMMITTEES (BASIC)

BASIC is a volunteer association of approximately 500 alumni in the United States and several foreign countries which assists the Admissions Office in the identification and evaluation of candidates. BASIC responsibilities include providing alumni interviews for applicants when distance or time precludes a visit to Brunswick, representing the College at local "college fair" programs, and, in general, serving as a liaison between the College and the public.

Those interested in learning more about the BASIC organization should contact Janet A. Lavin, associate director of admissions.

ALUMNI FUND

The Alumni Fund, inaugurated in 1869 and reorganized in 1919, has contributed more than \$29,000,000 for the current purposes and capital needs of the College through June 1988. The fund seeks either completely unrestricted or current purpose gifts.

Officers: Erik Lund '57, chairman; Donald B. Snyder '50, vice chairman.

Directors: Erik Lund '57 (term expires in 1989), Donald B. Snyder, Jr. '50

(term expires in 1990), Joan Benoit Samuelson '79 (term expires in 1991), I. Joel Abromson '60 (term expires in 1992), James W. MacAllen '66 (term expires in 1993).

ALUMNI FUND AWARDS

Alumni Fund Cup: Awarded annually since 1932, it is given to the reunion class with the most money in the Alumni Fund. The award is presented in the fall.

The recipient in 1987 was the Class of 1937, William R. Owen, agent.

Leon W. Babcock Plate: Presented to the College in 1980 by William L. Babcock, Jr. '69 and his wife, Suzanne, in honor of his grandfather Leon W. Babcock '17, it is awarded annually to the class making the largest dollar contribution to the Alumni Fund.

The recipient in 1987 was the Class of 1937, William R. Owen, agent.

Class of 1916 Bowl: Presented to the College by the Class of 1916 in 1959, it is awarded annually to the class whose record in the Alumni Fund shows the greatest improvement over its performance of the preceding year.

The recipients in 1987 were the Class of 1947, Arthur D. Dolloff, agent, and the Class of 1960, I. Joel Abromson, agent.

Class of 1929 Trophy: Presented by the Class of 1929 in 1963, it is awarded annually to that one of the ten youngest classes attaining the highest percentage of participation.

The recipient in 1987 was the Class of 1986, Richard J. Ganong, Jr. and Susan Pardus, agents.

Robert Seaver Edwards Trophy: Awarded annually to that one of the ten youngest classes raising the most money for the Fund, this trophy honors the memory of Robert Seaver Edwards '00.

The recipient in 1987 was the Class of 1977, Laurie A. Hawkes, agent.

Fund Directors' Trophy: Established in 1972 by the directors of the Alumni Fund, the trophy is awarded annually to the class which in the opinion of the directors achieved an outstanding performance not acknowledged by any other trophy.

The recipients in 1987 were the Class of 1950, Donald B. Snyder, Jr., agent, and the Class of 1957, David Z. Webster, agent.

THE PRESIDENT'S CUP FOR ALUMNI GIVING

Established by the Development Committee of the Governing Boards in 1985, two cups are awarded annually—one for classes out of college 49 years or less, and one for classes out of college 50 years or more. The awards are

presented on the basis of the total giving effort of a class, with all gifts actually received by or for the benefit of the College during the academic year eligible.

The recipients in 1987 were the Class of 1964 and the Class of 1920.

SOCIETY OF BOWDOIN WOMEN

The Society of Bowdoin Women was formed in 1922. Its purpose is to provide "an organization in which those with a common bond of Bowdoin loyalty may, by becoming better acquainted with the College and with each other, work together to serve the College."

The society has made specific gifts to the College, such as silver and china for the presidents' house. In 1961 it established the Edith Lansing Koon Sills Lecture Fund, honoring Mrs. Kenneth C. M. Sills, wife of a former president of the College, and in 1971, following the decision to admit women undergraduates, the society created a scholarship fund restricted to qualified women students. In 1978 the Society of Bowdoin Women Athletic Award was established to recognize effort, cooperation, and sportsmanship by a senior member of a women's varsity team. In 1983 the society established the Frank F. Sabasteanski Polar Bear Run in honor of the long-time Bowdoin track coach. And in 1985, the Dorothy Haythorn Collins Award was created to honor a junior student of outstanding quality in his or her chosen field of study. Contributions have also been made to the Elisabeth Clark Wilder Scholarship Fund in memory of Mrs. Philip S. Wilder, a former president and long-time member of the society. Funds have also been used to increase the scholarship endowment; to add to the Daggett Book Fund in memory of Mrs. Athern P. Daggett, the vice president-at-large at the time of her death; to purchase equipment for the Office of Career Services; to co-sponsor the New York Contemporary Choreographers Series; and to sponsor the L. L. Bean fashion show featuring college models.

Membership is open to any interested person by the payment of annual dues of \$3.00. The programs and activities are made possible by the dues, contributions, and bequests.

Officers: Mrs. Edward W. Rogers, president; Mrs. A. LeRoy Greason, honorary president; Mrs. Ralph Hagan, vice president; Mrs. Robert Brownell, secretary; Mrs. Russell S. Douglas, treasurer; Mrs. Thomas Deveaux, assistant treasurer; Mrs. Paul H. Noone, activities coordinator; Mrs. Michael Demers, membership; Mrs. Dana Mayo, nominating; and Mrs. Olin M. Sawyer, past president.

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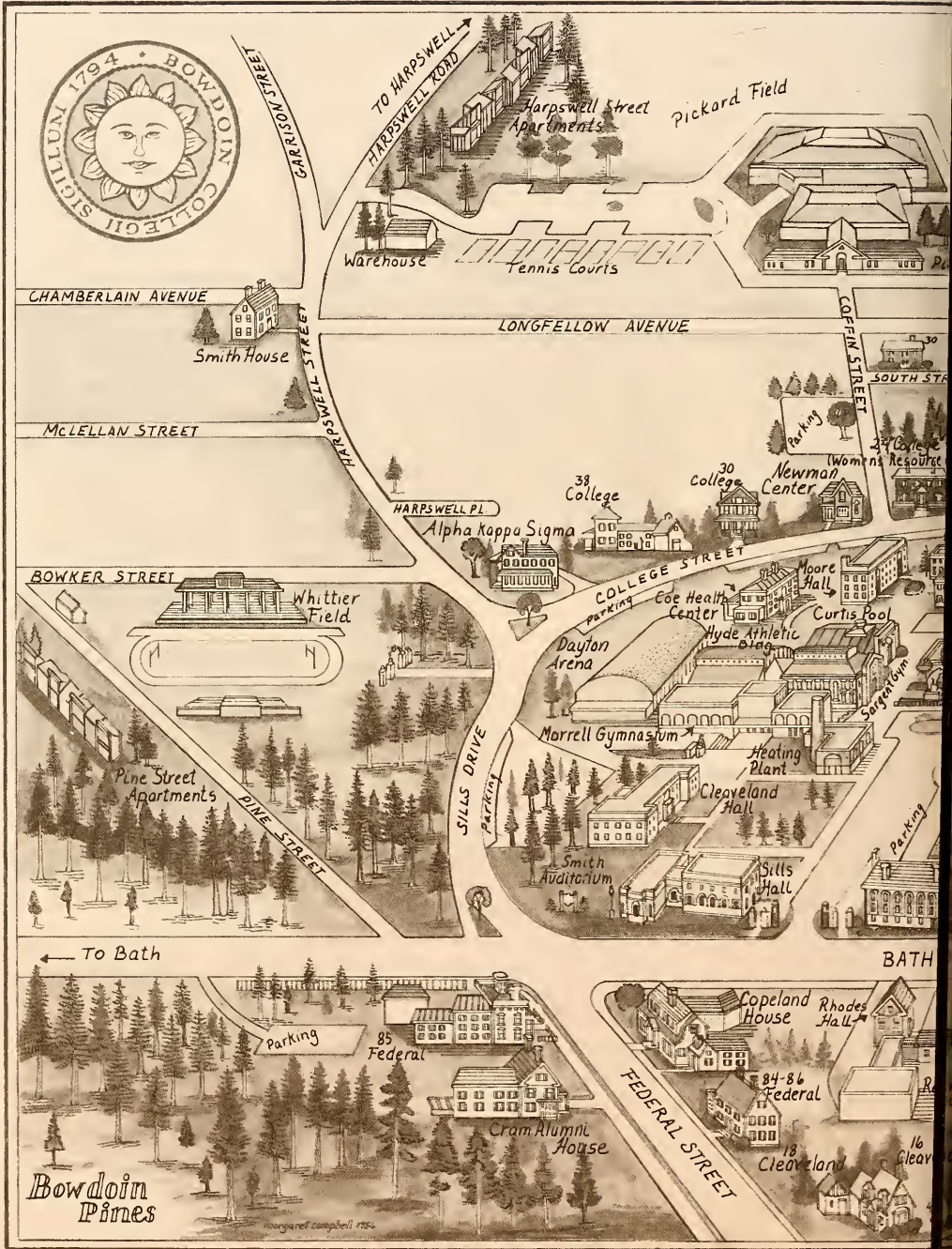
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